

AMENDED AND RESTATED BYLAWS OF BIOLIFE SOLUTIONS, INC.

Section 1. Law, Certificate of Incorporation and Bylaws

- 1.1. These bylaws are subject to the certificate of incorporation of the corporation. In these bylaws, references to law, the certificate of incorporation and bylaws mean the law, the provisions of the certificate of incorporation and the bylaws as from time to time in effect.

Section 2. Stockholders

- 2.1. **Annual Meeting.** The annual meeting of stockholders shall be held at such date and time as shall be designated from time to time by the board of directors and stated in the notice of the meeting, at which they shall elect a board of directors and transact such other business as may be required by law or these bylaws or as may properly come before the meeting.
- 2.2. **Special Meetings.** A special meeting of the stockholders may be called at any time by the chairman of the board, if any, the president or the board of directors. A special meeting of the stockholders shall be called by the president or secretary upon written request of the holders of thirty five percent (35%) of the outstanding shares entitled to vote thereat, or as otherwise required by law. A special meeting of the stockholders shall be called by the secretary, or in the case of the death, absence, incapacity or refusal of the secretary, by an assistant secretary or some other officer, upon application of a majority of the directors. Any such application shall state the purpose or purposes of the proposed meeting. Any such call shall state the place, date, hour, and purposes of the meeting.
- 2.3. **Place of Meeting.** All meetings of the stockholders for the election of directors or for any other purpose shall be held at such place within or without the State of Delaware as may be determined from time to time by the chairman of the board, if any, the president or the board of directors. Any adjourned session of any meeting of the stockholders shall be held at the place designated in the vote of adjournment.
- 2.4. **Notice of Meetings.** Except as otherwise provided by law, a written notice of each meeting of stockholders stating the place, day and hour thereof and, in the case of a special meeting, the purposes for which the meeting is called, shall be given not less than ten nor more than sixty days before the meeting, to each stockholder entitled to vote thereat, and to each stockholder who, by law, by the certificate of incorporation or by these bylaws, is entitled to notice, by leaving such notice with him or at his residence or usual place of business, or by depositing it in the United States mail, postage prepaid, and addressed to such stockholder at his address as it appears in the records of the corporation. Such notice shall be given by the secretary, or by an officer or person designated by the board of directors, or in the case of a special meeting by the officer calling the meeting. As to any adjourned session of any meeting of stockholders, notice of the adjourned meeting need not be given if the time and place thereof are announced at the meeting at which the adjournment was taken except that if the adjournment is for more than thirty days or if after the adjournment a new record date is set for the adjourned session, notice of any such adjourned session of the meeting shall be given in the manner heretofore described. No notice of any meeting of stockholders or any adjourned session thereof need be given to a stockholder

if a written waiver of notice, executed before or after the meeting or such adjourned session by such stockholder; is filed with the records of the meeting or if the stockholder attends such meeting without objecting at the beginning of the meeting to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any meeting of the stockholders or any adjourned session thereof need be specified in any written waiver of notice.

- 2.5. Quorum of Stockholders.** At any meeting of the stockholders a quorum as to any matter shall consist of a majority of the votes entitled to be cast on the matter, except where a larger quorum is required by law, by the certificate of incorporation or by these bylaws. Any meeting may be adjourned from time to time by a majority of the votes properly cast upon the question, whether or not a quorum is present. If a quorum is present at an original meeting, a quorum need not be present at an adjourned session of that meeting. Shares of its own stock belonging to the corporation or to another corporation, if a majority of the shares entitled to vote in the election of directors of such other corporation is held, directly or indirectly, by the corporation, shall neither be entitled to vote nor be counted for quorum purposes; provided, however, that the foregoing shall not limit the right of any corporation to vote stock, including but not limited to its own stock, held by it in a fiduciary capacity.
- 2.6. Action by Vote.** When a quorum is present at any meeting, a plurality of the votes properly cast for election to any office shall elect to such office and a majority of the votes properly cast upon any question other than an election to an office shall decide the question, except when a larger vote is required by law, by the certificate of incorporation or by these bylaws. No ballot shall be required for any election unless requested by a stockholder present or represented at the meeting and entitled to vote in the election.
- 2.7. Proxy Representation.** Every stockholder may authorize another person or persons to act for him by proxy in all matters in which a stockholder is entitled to participate, whether by waiving notice of any meeting, objecting to or voting or participating at a meeting, or expressing consent or dissent without a meeting. Every proxy must be signed by the stockholder or by his attorney-in-fact. No proxy shall be voted or acted upon after three years from its date unless such 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. A proxy may be made irrevocable regardless of whether the interest with which it is coupled is an interest in the stock itself or an interest in the corporation generally. The authorization of a proxy may but need not be limited to specified action, provided, however, that if a proxy limits its authorization to a meeting or meetings of stockholders, unless otherwise specifically provided such proxy shall entitle the holder thereof to vote at any adjourned session but shall not be valid after the final adjournment thereof.
- 2.8. Inspectors.** The directors or the person presiding at the meeting may, but need not, appoint one or more inspectors of election and any substitute inspectors to act at the meeting or any adjournment thereof. Each inspector, before entering upon the discharge of his duties, shall take and sign an oath faithfully to execute the duties of inspector at such meeting with strict impartiality and according to the best of his ability. The inspectors, if any, shall determine the number of shares of stock outstanding and the voting power of each, the shares of stock represented at the meeting, the existence of a quorum, the validity and effect of proxies, and shall receive votes, ballots or consents, hear and determine all challenges and questions arising in connection with the right to vote, count and tabulate all votes, ballots or consents, determine the result,

and do such acts as are proper to conduct the election or vote with fairness to all stockholders. Notwithstanding the foregoing, in the event that a stockholder seeks to nominate one or more directors pursuant to Section 3.3 of these bylaws, the directors shall appoint two inspectors, who shall not be affiliated with the Corporation, to determine whether a stockholder has complied with Section 3.3 of these bylaws. If the inspector shall determine that a stockholder has not complied with Section 3.3 of these bylaws, the inspectors shall direct the person presiding over the meeting to declare to the meeting that a nomination was not made in accordance with the procedures prescribed by the bylaws; and the person presiding over the meeting shall so declare to the meeting and the defective nomination shall be disregarded. On request of the person presiding at the meeting, the inspectors shall make a report in writing of any challenge, question or matter determined by them and execute a certificate of any fact found by them.

- 2.9. List of Stockholders.** The secretary shall prepare and make, at least ten days before every meeting of stockholders, a complete list of the stockholders entitled to vote at such meeting, arranged in alphabetical order and showing the address of each stockholder and the number of shares registered in his name. The stock ledger shall be the only evidence as to who are stockholders entitled to examine such list or to vote in person or by proxy at such meeting.

Section 3. Board of Directors

- 3.1. Number.** The number of directors which shall constitute the whole board shall not be less than three (3). The exact number of directors shall be fixed from time to time by a resolution adopted by a majority of directors. The number of directors may be increased at any time or from time to time by the directors by vote of a majority of the directors then in office. The number of directors may be decreased to any number permitted by the foregoing at any time by the directors by vote of a majority of the directors then in office, but only to eliminate vacancies existing by reason of the death, resignation or removal of one or more directors. Directors need not be stockholders.
- 3.2. Tenure.** Except as otherwise provided by law, by the certificate of incorporation or by these bylaws, each director shall hold office until the successors of such director's class are elected and qualified, or until he sooner dies, resigns, is removed or becomes disqualified.
- 3.3. Nomination.** Only persons who are nominated in accordance with the procedures set forth in this Section 3.3 shall be eligible for election as directors. Nominations of persons for election to the board of directors may be made by or at the direction of the board of directors or by any stockholder of the corporation entitled to vote for the election of directors at the meeting who complies with the notice procedures set forth in this Section 3.3. Such nominations, other than those made by or at the discretion of the board of directors, shall be made pursuant to timely notice in writing to the Secretary. To be timely, a stockholder's notice shall be delivered to or mailed and received at the principal executive offices of the corporation not less than 45 days nor more than 90 days prior to the meeting; provided, however, that in the event that less than 55 days' notice or prior public disclosure of the date of the meeting is given or made to stockholders, notice by the stockholder to be timely must be so received not later than the close of business on the 10th day following the date on which such notice of the date of the meeting was mailed or such public disclosure was made. Such stockholder's notice shall set forth (A) as to each person whom the stockholder proposes to nominate for election or reelection as a director; (i) the name, age, business address and residence address of such person, (ii) the principal occupation or employment of such person, (iii) the class and number of shares of the capital stock of the corporation which are beneficially owned by such person and (iv) any other

information relating to such person that would be required to be disclosed in solicitations of proxies for election of directors, or would be otherwise required, in each case pursuant to Regulation 14A promulgated under the Securities Exchange Act of 1934, as amended (including without limitation such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected); and (B) as to the stockholder giving the notice (i) the name and address of such stockholder and (ii) the class and number of shares of the capital stock of the corporation which are beneficially owned (as defined by Rule 13d-3 of the Securities Exchange Act of 1934, as amended) by such stockholder. If requested in writing by the Secretary at least 15 days in advance of the annual meeting, a stockholder whose shares are not registered in the name of such stockholder on the corporation's books shall provide the Secretary, within ten days of such request, with documentary support for such claim of beneficial ownership. 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 that information required to be set forth in a stockholder's notice of nomination which pertains to the nominee.

- 3.4. Powers.** The business and affairs of the corporation shall be managed by or under the direction of the board of directors who shall have and may exercise all the powers of the corporation and do all such lawful acts and things as are not by law, the certificate of incorporation or these bylaws directed or required to be exercised or done by the stockholders.
- 3.5. Vacancies.** Vacancies and any newly created directorships resulting from any increase in the number of directors may be filled by vote of the stockholders at a meeting called for the purpose, or by a majority of the directors then in office, although less than a quorum, or by a sole remaining director. When one or more directors shall resign from the board, effective at a future date, a majority of the directors then in office, including those who have resigned, shall have power to fill such vacancy or vacancies, the vote or action by writing thereon to take effect when such resignation or resignations shall become effective. The directors shall have and may exercise all their powers notwithstanding the existence of one or more vacancies in their number, subject to any requirements of law or of the certificate of incorporation or of these bylaws as to the number of directors required for a quorum or for any vote or other actions.
- 3.6. Committees.** The board of directors may, by vote of a majority of the whole board, (a) designate, change the membership of or terminate the existence of any committee or committees, each committee to consist of one or more of the directors; (b) designate one or more directors as alternate members of any such committee who may replace any absent or disqualified member at any meeting of the committee; and (c) determine the extent to which each such committee shall have and may exercise the powers of the board of directors in the management of the business and affairs of the corporation, including the power to authorize the seal of the corporation to be affixed to all papers which require it and the power and authority to declare dividends or to authorize the issuance of stock; excepting, however, such powers which by law, by the certificate of incorporation or by these or by these bylaws they are prohibited from so delegating. In the absence or disqualification of any member of such committee and his alternate, if any, the member or members thereof present at any meeting and not disqualified from voting, whether or not constituting a quorum, may unanimously appoint another member of the board of directors to act at the meeting in the place of any such absent or disqualified member. Except as the board of directors may otherwise determine, any committee may make rules for the conduct of its business, but unless otherwise provided by the board or such rules,

its business shall be conducted as nearly as may be in the same manner as is provided by these bylaws for the conduct of business by the board of directors. Each committee shall keep regular minutes of its meetings and report the same to the board of directors upon request.

- 3.7. Regular Meetings.** Regular meetings of the board of directors may be held without call or notice at such places within or without the State of Delaware and at such times as the board may from time to time determine, provided that notice of the first regular meeting following any such determination shall be given to absent directors. A regular meeting of the directors may be held without call or notice immediately after and at the same place as the annual meeting of the stockholders.
- 3.8. Special Meetings.** Special meetings of the board of directors may be held at any time and at any place within or without the State of Delaware designated in the notice of the meeting, when called by the chairman of the board, if any, the president, or by one-third or more in number of the directors, reasonable notice thereof being given to each director by the secretary or by the chairman of the board, if any, the president or any one of the directors calling the meeting.
- 3.9. Notice.** Any time it is necessary to give notice of a board of directors' meeting, notice shall be given (i) in person or by telephone to the director at least 24 hours in advance of the meeting, (ii) by personally delivering written notice to the director's last known business or home address at least 24 hours in advance of the meeting, (iii) by delivering an electronic transmission (including, without limitation, via telefacsimile or electronic mail) to the director's last known number or address for receiving electronic transmissions of that type at least 24 hours in advance of the meeting, (iv) by depositing written notice with a reputable delivery service or overnight carrier addressed to the director's last known business or home address for delivery to that address no later than the business day preceding the date of the meeting or (v) by depositing written notice in the U.S. mail, postage prepaid, addressed to the director's last known business or home address no later than the third business day preceding the date of the meeting. Notice of a meeting need not be given to any director if a written waiver of notice, executed by him, or a waiver sent by electronic transmission by him, in either case before or after the meeting, is filed with the records of the meeting, or to any director who attends the meeting without protesting prior thereto or at its commencement the lack of notice to him. Neither notice of a meeting nor a waiver of a notice need specify the purposes of the meeting.
- 3.10. Quorum.** Except as may be otherwise provided by law, by the certificate of incorporation or these bylaws, at any meeting of the directors a majority of the directors then in office shall constitute a quorum; a quorum shall not in any case be less than one-third of the total number of directors constituting the whole board, with a minimum of two directors constituting a quorum. Any meeting may be adjourned from time to time by a majority of the votes cast upon the question, whether or not a quorum is present, and the meeting may be held as adjourned without further notice.
- 3.11. Action by Vote.** Except as may be otherwise provided by law, by the certificate of incorporation or by these bylaws, when a quorum is present at any meeting the vote of a majority of the directors present shall be the act of the board of directors.
- 3.12. Action Without a Meeting.** Any action required or permitted to be taken at any meeting of the board of directors or a committee thereof may be taken without a meeting if all the

members of the board or of such committee, as the case may be, consent thereto in writing or by electronic transmission, and such writing or writings or electronic transmission or transmissions are filed with the records of the meetings of the board or of such committee. Such consent shall be treated for all purposes as the act of the board or of such committee, as the case may be.

3.13. Participation in Meetings by Conference Telephone. Members of the board of directors, or any committee designated by such board, may participate in a meeting of such board or committee by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other or by any other means permitted by law. Such participation shall constitute presence in person at such meeting.

3.14. Compensation. In the discretion of the board of directors, each director may be paid such fees for his services as director and be reimbursed from his reasonable expenses incurred in the performance of his duties as director as the board of directors from time to time may determine. Nothing contained in this section shall be construed to preclude any director from serving the corporation in any other capacity and receiving reasonable compensation therefor.

3.15. Interested Directors and Officers.

- a. No contract or transaction between the corporation and one or more of its directors or officers, or between the corporation and any other corporation, partnership, association, or other organization in which one or more of the corporation's directors or officers are directors or officers, or have a financial interest, shall be void or voidable, solely for this reason, or solely because the director officer is present at or participates in the meeting of the board or committee thereof which authorizes the contract or transaction, or solely because his or their votes are counted for such purpose, if:
 1. The material facts as to his relationship or interest and as to the contract or transaction are disclosed or are known to the board of directors or the committee, and the board or committee in good faith authorizes the contract or transaction by the affirmative votes of majority of the disinterested directors, even though the disinterested directors be less than a quorum; or
 2. The material facts as to his relationship or interest and as to the contract or transaction are disclosed or are known to the stockholder entitled to vote thereon, and the contract or transaction is specifically approved in good faith by vote of the stockholders; or
 3. The contract or transaction is fair as to the corporation as of the time it is authorized, approved or ratified by the board of directors, a committee thereof, or the stockholders.
- b. Common or interested directors may be counted in determining the presence of a quorum at a meeting of the board of directors or of a committee which authorized the contract or transaction.

Section 4. Officers and Agents.

4.1. Enumeration: Qualification. The officers of the corporation shall be a president, a treasurer, a secretary and such other officers, if any, as the board of directors from time to time may in its discretion elect or appoint including without limitation a chairman of the board, one or more vice presidents and a controller. The corporation may also have such agents, if any, as the board of directors from time to time may in its discretion choose. Any officer may be but none need be a director or stockholder. Any two or more offices may be held by the same person. Any

officer may be required by the board of directors to secure the faithful performance of his duties to the corporation by giving bond in such amount and with sureties or otherwise as the board of directors may determine.

- 4.2. Powers.** Subject to law, to the certificate of incorporation and to the other provisions of these bylaws, each officer shall have, in addition to the duties and powers herein set forth, such duties and powers as are commonly incident to his office and such additional duties and powers as the board of directors may from time to time designate.
- 4.3. Election.** The officers may be elected by the board of directors at their first meeting following the annual meeting of the stockholders or at any other time. At any time or from time to time the directors may delegate to any officer their power to elect or appoint any other officer or any agents.
- 4.4. Tenure.** Each officer shall hold office until the first meeting of the board of directors following the next annual meeting of the stockholders and until his respective successor is chosen and qualified unless a shorter period shall have been specified by the terms of his election or appointment, or in each case until he sooner dies, resigns, is removed or becomes disqualified. Each agent shall retain his authority at the pleasure of the directors, or the officer by whom he was appointed or by the officer who then holds agent appointive power.
- 4.5. Chairman of the board of directors, President and Vice President.** The chairman of the board, if any, shall have such duties and powers as shall be designated from time to time by the board of directors. Unless the board of directors otherwise specifies, the chairman of the board, or if there is none the chief executive officer, shall preside, or designate the person who shall preside, at all meetings of the stockholders and of the board of directors.

Unless the board of directors otherwise specifies, the president shall be the chief executive officer and shall have direct charge of all business operations of the corporation and, subject to the control of the directors, shall have general charge and supervision of the business of the corporation.

Any vice president shall have such duties and powers as shall be set forth in these bylaws or as shall be designated from time to time by the board of directors or by the president.

- 4.6. Chief Financial Officer and Assistant Treasurers.** Unless the board of directors otherwise specifies, the chief financial officer shall be the treasurer of the corporation and shall be in charge of its funds and valuable papers, and shall have such other duties and powers as may be designated from time to time by the board of directors or by the president. If no controller is elected, the chief financial officer shall, unless the board of directors otherwise specifies, also have the duties and powers of the controller:

Any assistant treasurers shall have such duties and powers as shall be designated from time to time by the board of directors, the president or the chief financial officer:

- 4.7. Controller and Assistant Controller.** If a controller is elected, he shall, unless the board of directors otherwise specifies, be the chief accounting officer of the corporation and be in charge of its books of account and accounting records, and of its accounting procedures. He shall have

such other duties and powers and may be designated from time to time by the board of directors, the president or the treasurer.

Any assistant controller shall have such duties and powers as shall be designated from time to time by the board of directors, the president, the treasurer or the controller.

- 4.8. Secretary and Assistant Secretaries.** The secretary shall record all proceedings of the stockholders, of the board of directors and of committees of the board of directors in a book or series of books to be kept therefore and shall file therein all actions by written consent of stockholders or directors. In the absence of the secretary from any meeting, an assistant secretary, or if there be none or he is absent, a temporary secretary chosen at the meeting, shall record the proceedings thereof. Unless a transfer agent has been appointed the secretary shall keep or cause to be kept the stock and transfer records of the corporation, which shall contain the names and record addresses of all stockholders and the number of shares registered in the name of each stockholder. He shall have such other duties and powers as may from time to time be designated by the board of directors or the president.

Any assistant secretaries shall have such duties and powers as shall be designated from time to time by the board of directors, the president or the secretary.

Section 5. Resignations and Removals.

- 5.1.** Any director or officer may resign at any time by delivering his resignation in writing or by electronic transmission to the chairman of the board, if any, the president, or the secretary or to a meeting of the board of directors. Such resignation shall be effective upon receipt unless specified to be effective at some other time, and without in either case the necessity of its being accepted unless the resignation shall so state. A director (including persons elected by directors to fill vacancies in the board) may be removed from office with or without cause by the vote of the holders of a majority of the shares issued and outstanding and entitled to vote in the election of directors. The board of directors may at any time remove any officer either with or without cause. The board of directors may at any time terminate or modify the authority of any agent. No director or officer resigning and (except where a right to receive compensation shall be expressly provided in a duly authorized written agreement with the corporation) no director or officer removed shall have any right to any compensation as such director or officer for any period following his resignation or removal, or any right to damages on account of such removal, whether his compensation be by the month or by the year or otherwise; unless, in the case of a resignation, the directors, or, in the case of removal, the body acting on the removal, shall in their or its discretion provide for compensation.

Section 6. Vacancies.

- 6.1.** If the office of the president or the treasurer or the secretary becomes vacant, the directors may elect a successor by vote of a majority of the directors then in office. If the office of any other officer becomes vacant, any person or body empowered to elect or appoint that officer may choose a successor. Each such successor shall hold office for the unexpired term, and in the case of the president, the treasurer and the secretary until his successor is chosen and qualified or in each case he sooner dies, resigns, is removed or becomes disqualified. Any vacancy of a directorship shall be filled as specified in Section 3.5 of these bylaws.

Section 7. Capital Stock.

7.1. Stock Certificates. The shares of the corporation shall be represented by certificates, provided that the board of directors of the corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the corporation. Notwithstanding the adoption of such a resolution by the board of directors, every holder of stock represented by certificates and upon request every holder of uncertificated shares shall be entitled to have a certificate signed by, or in the name of the corporation by the chairman or vice-chairman of the board of directors, if any, or the president or vice-president, and by the treasurer or an assistant treasurer, or by the secretary or an assistant secretary of such corporation representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he were such officer, transfer agent, or registrar at the time of issue.

7.2. Loss of Certificates. In the case of the alleged theft, loss, destruction or mutilation of a certificate of stock, a duplicate certificate may be issued in place thereof, upon such terms, including receipt of a bond sufficient to indemnify the corporation against any claim on account thereof, as the board of directors may prescribe.

Section 8. Transfer of Shares of Stock.

8.1. Transfer on Books. Subject to the restrictions, if any, stated or noted on the stock certificate, shares of stock may be transferred on the books of the corporation by the surrender to the corporation or its transfer agent of the certificate therefor properly endorsed or accompanied by a written assignment and power of attorney properly executed, with necessary transfer stamps affixed, and with such proof of the authenticity of signature as the board of directors or the transfer agent of the corporation may reasonably require. Except as may be otherwise required by law, by the certificate of incorporation or by these bylaws, the corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends and the right to receive notice and to vote or to give any consent with respect thereto and to be held liable for such calls and assessments, if any, as may lawfully be made thereon, regardless of any transfer, pledge or other disposition of such stock until the shares have been properly transferred on the books of the corporation.

It shall be the duty of each stockholder to notify the corporation of his post office address.

8.2. Record Date and Closing Transfer Books. In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the board of directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the board of directors, and which record date shall not be more than sixty nor less than ten days before the date of such meeting. If no such record date is fixed by the board of directors, the record date for determining the stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is

held. A determination of stockholders or record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the board of directors may fix a new record date for the adjourned meeting.

In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the board of directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than sixty days prior to such payment, exercise or other action. If no such record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the board of directors adopts the resolution relating thereto.

Section 9. Indemnification.

9.1. Right to Indemnification. Each person who was or is made a party or is threatened to be made a party to or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (hereinafter a “proceeding”), by reason of the fact that he or she is or was a director officer of the corporation or is or was serving at the request of the corporation as a director or officer of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans (hereinafter an “indemnitee”), whether the basis of such proceeding is alleged action in an official capacity as a director or officer or in any other capacity while serving as a director or officer; shall be indemnified and held harmless by the corporation to the fullest extent authorized by the Delaware General Corporation Law, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the corporation to provide broader indemnification rights than such law permitted the corporation to provide prior to such amendment), against all expense, liability and loss (including attorneys’ fees, judgments, fines, ERISA excise taxes or penalties and amounts paid in settlement) reasonably incurred or suffered by such indemnitee in connection therewith and such indemnification shall continue as to an indemnitee who has ceased to be a director or officer and shall inure to the benefit of the indemnitee’s heirs, executors and administrators; provided, however, that, except as provided in this Section 9.1 with respect to proceedings to enforce rights to indemnification, the corporation shall indemnify any such indemnitee in connection with a proceeding (or part thereof) initiated by such indemnitee only if such proceeding (or part thereof) was authorized by the board of directors of the corporation. The right to indemnification conferred in this Section 9.1 shall be a contract right and shall include the right to be paid by the corporation the expenses incurred in defending any such proceeding in advance of its final disposition (hereinafter an “advancement of expenses”); provided, however, that, if the Delaware General Corporation Law requires, an advancement of expenses incurred by an indemnitee in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such indemnitee, including without limitation, service to an employee benefit plan) shall be made only upon delivery to the corporation of an undertaking, by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is not further right to appeal that such indemnitee is not entitled to be indemnified for such expenses under this Section 9 or otherwise (hereinafter an “undertaking”).

- 9.2. Right of Indemnitee to Bring Suit.** If a claim under Section 9.1 of these bylaws is not paid in full by the corporation within forty-five (45) days after a written claim has been received by the corporation, the indemnitee may at any time thereafter bring suit against the corporation to recover the unpaid amount of the claim. If successful in whole or part in any such suit or in a suit brought by the corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the indemnitee shall be entitled to be paid also the expense of prosecuting or defending such suit. In (i) any suit brought by the indemnitee to enforce a right to indemnification hereunder (but not in a suit brought by the indemnitee to enforce a right to an advancement of expenses) it shall be a defense that, and (ii) any suit by the corporation to recover an advancement of expenses pursuant to the terms of an undertaking the corporation shall be entitled to recover such expenses upon a final adjudication that, the indemnitee has not met the applicable standard of conduct set forth in the Delaware General Corporation Law. Neither the failure of the corporation (including its board of directors, independent legal counsel, or its stockholders) to have made a determination prior to the commencement of such suit that indemnification of the indemnitee is proper in the circumstances because the indemnitee has met the applicable standard of conduct set forth in the Delaware General Corporation Law, nor an actual determination by the corporation (including its board of directors, independent legal counsel, or its stockholders) that the indemnitee has not met such applicable standard of conduct, shall create a presumption that the indemnitee has not met the applicable standard of conduct or; in the case of such a suit brought by indemnitee, be a defense to such suit. In any suit brought by the indemnitee to enforce a right hereunder, or by the corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the burden of proving that the indemnitee is not entitled to be indemnified or to such advancement of expenses under this Section 9 or otherwise shall be on the corporation.
- 9.3. Non-Exclusivity of Rights.** The rights of indemnification and to the advancement of expenses conferred in this Section 9 shall not be exclusive of any other right which any person may have or thereafter acquire under any statute, provision of the Certificate of Incorporation, by-law agreement, vote of stockholders or disinterested directors or otherwise and shall inure to the benefit of the heirs and legal representatives of such person.
- 9.4. Insurance.** The corporation may maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss, whether or not the corporation would have the power to indemnify such person against such expense, liability or loss under the Delaware General Corporation Law.
- 9.5. Indemnification of Employees or Agents of the Corporation.** The corporation may, to the extent authorized from time to time by the board of directors, grant rights to indemnification and to the advancement of expenses, to any employee or agent of the corporation to the fullest extent of the provisions of this Section 9 with respect to the indemnification and advancement of expenses of directors or officers of the corporation.
- 9.6. Indemnification Contracts.** The board of directors is authorized to enter into a contract with any director, officer, employee or agent of the corporation, or any person serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, including employee benefit plans, providing

for indemnification rights equivalent to or, if the board of directors so determines, greater than, those provided for in this Section 9.

- 9.7. Effect of Amendment.** Any amendment, repeal or modification of any provision of this Section 9 by the stockholders or the directors of the corporation shall not adversely affect any right or protection of a director or officer of the corporation existing at the time of such amendment, repeal or modification.

Section 10. General Provisions.

- 10.1. Corporate Seal.** Subject to alteration by the directors, the seal of the corporation shall consist of a flat-faced circular die with the word "Delaware" and the name of the corporation cut or engraved thereon, together with such other words, dates or images as may be approved from time to time by the directors.
- 10.2. Execution of Papers.** Except as the board of directors may generally or in particular cases authorize the execution thereof in some other manner; all deeds, leases, transfers, contracts, bonds, notes, checks, drafts or other obligations made, accepted or endorsed by the corporation shall be signed by the chairman of the board, if any, the president, a vice president or the treasurer.
- 10.3. Fiscal Year.** The fiscal year of the corporation shall be fixed by resolution of the Board of Directors.
- 10.4. Electronic Transmission.** For purposes of these bylaws, "electronic transmission" shall mean a form of communication not directly involving the physical transmission of paper that satisfies the requirements with respect to such communications contained in the Delaware General Corporation Law.
- 10.5. Amendments.** These bylaws may be adopted, amended or repealed by vote of a majority of the directors then in office or by vote of a majority of the stock outstanding and entitled to vote. Any by-law, whether adopted, amended or repealed by the stockholders or directors, may be amended or reinstated by the stockholders or the directors.