

BY-LAW NO. 1

Amended and Restated as of August 28, 2018

A by-law relating generally to the conduct of the business and affairs of
CARDIOL THERAPEUTICS INC.
(herein called the "Corporation")

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BE IT ENACTED as a by-law of the Corporation as follows:

1. INTERPRETATION

1.01 In this by-law, unless the context otherwise requires:

- (a) **"Act"** means the *Business Corporations Act* (Ontario), and any statute that may be substituted therefore, as amended from time to time, and includes the Regulations made pursuant thereto, as amended from time to time;
- (b) **"articles"** means the Articles of Incorporation and/or other constituting of the Corporation as amended from time to time;
- (c) **"board"** means the board of directors of the Corporation;
- (d) **"by-laws"** means all by-laws, including special by-laws, of the Corporation as amended from time to time;
- (e) **"Corporation"** means this Corporation;
- (f) **"meeting of shareholders"** includes an annual meeting of shareholders and a special meeting of shareholders;
- (g) **"number of directors"** means the number of directors provided for in the articles or, where a minimum and maximum number of directors is provided for in the articles, the number of directors determined by a special resolution or resolution passed pursuant to the relevant provisions of the Act;

- (h) “**person**” includes an individual, sole proprietorship, partnership, unincorporated association, unincorporated syndicate, unincorporated organization, trust, body corporate, and a natural person in his capacity as trustee, executor, administrator or other legal representative;
- (i) “**recorded address**” means, in the case of a shareholder, the shareholder’s address as recorded in the shareholders’ register; and in the case of joint shareholders, the address appearing in the shareholders’ register in respect of such joint holding or the first address so appearing if there is more than one; in the case of a director, officer, auditor or member of a committee of the board, his latest address as shown in the records of the Corporation or in the most recent notice filed under the *Corporations Information Act*, whichever is the more current. The secretary may change or cause to be changed the recorded address of any person in accordance with any information believed by him to be reliable.
- (j) “**special meeting of shareholders**” means a special meeting of all shareholders entitled to vote at an annual meeting of shareholders and a meeting of any class or classes of shareholders entitled to vote on the question at issue.

1.02 In this by-law where the context requires, words importing the singular include the plural and vice versa and words importing gender include the masculine, feminine and neutral genders.

1.03 All the words and terms appearing in this by-law shall have the same definitions and application as in the Act.

1.04 If any of the provisions contained in this by-law are inconsistent with those contained in the articles or a unanimous shareholders agreement, the provisions contained in the articles or unanimous shareholders agreement, as the case may be, shall prevail.

2. BUSINESS OF THE CORPORATION

2.01 Corporate Seal - The seal of the Corporation shall be such as the directors may adopt. The Corporation may, but need not, have a corporate seal.

2.02 Financial Year - Unless and until another date has been effectively determined, the fiscal year or financial year of the Corporation shall end on December 31st in each year.

2.03 Execution of Instruments - Subject to any unanimous shareholder agreement, Deeds, transfers, assignments, contracts, obligations, certificates and other instruments, including instruments creating a security interest, shall be signed on behalf of the Corporation by any director or officer and when so signed shall be binding upon the Corporation without any further authorization or formality. Any signing officer may affix the corporate seal to any instrument requiring the same.

2.04 Registered Office - The shareholders may, by special resolution, from time to time change the municipality or geographic township within Ontario in which the registered office of the Corporation shall be located, unless and until such special resolution has been passed, the registered office shall be where initially specified in the articles. The directors shall from time to time fix the location of the registered office within such municipality or geographic township.

2.05 Banking - All matters pertaining to the banking of the Corporation shall be transacted with such banks, trust companies or other financial organizations as the board may designate or authorize from time to time. All such banking business shall be transacted on behalf of the Corporation pursuant to such agreements, instructions and delegations of powers as may, from time to time, be prescribed by the board.

3. DIRECTORS

3.01 Qualifications — Any individual may be a director of the Corporation except:

- (a) An individual who is less than eighteen years of age;
- (b) An individual who has been found under the *Substitute Decisions Act, 1992*, as amended, or under the Mental Health Act, as amended, to be incapable of managing property or who has been found to be incapable by a court in Canada or elsewhere;
- (c) An individual who has the status of a bankrupt.

A director need not be a shareholder.

3.02 Resident Canadians - At least twenty-five percent of the directors shall be resident Canadians but where the Corporation has less than four directors, at least one director shall be a resident Canadian.

3.03 Election and Term - The election of directors shall take place at the first meeting of shareholders and at each succeeding annual meeting of shareholders at which an election of directors is required. The directors shall hold office for an expressly stated term which shall expire not later than the close of the third annual meeting of shareholders following the election. A director not elected for an expressly stated term ceases to hold office at the close of the first annual meeting of shareholders following his election. Incumbent directors, if qualified, shall be eligible for re-election. The election may be by signed resolution. If an election of directors is not held at the proper time the incumbent directors shall continue in office until their successors are elected.

3.04 Resignation - A director who is not named in the articles may resign from office upon giving a written resignation to the Corporation and such resignation becomes effective when received by the Corporation or at the time specified in the resignation, whichever is later. A director named in the articles shall not be permitted to resign his office unless at the time the resignation is to become effective a successor is elected or appointed.

3.05 Removal - Subject to the provisions of the Act, the shareholders may, by ordinary resolution passed at an annual or special meeting remove any director or directors from office before the expiration of his term and the vacancy created by such removal may be filled at the same meeting, failing which it may be filled by the directors.

3.06 Vacation of Office - A director ceases to hold office when he dies; he is removed from office by the shareholders; he ceases to be qualified for election as a director; or upon the effective date of his resignation in accordance with section 3.04 hereof.

3.07 Vacancies - Subject to the Act and any unanimous shareholder agreement, a quorum of the board may fill a vacancy in the board, except a vacancy resulting from an increase in the number of directors or in the maximum number of directors or from a failure of the shareholders to elect the number of directors. In the absence of a quorum of the board, or if the vacancy has arisen from a failure of the shareholders to elect the number of directors, the board shall forthwith call a special meeting of shareholders to fill the vacancy. If the board fails to call such a meeting or if there are no such directors then in office, any shareholder may call the meeting.

4. MEETINGS OF DIRECTORS

4.01 Place of Meetings - Meetings of the board may be held at any place within or outside of Ontario. In any financial year of the Corporation a majority of the meetings of the board need not be held at a place within Canada.

4.02 Powers - Subject to the express provisions of a unanimous shareholder agreement, the directors shall manage or supervise the management of the business and affairs of the Corporation.

4.03 Transaction of Business - Business may be transacted by resolutions passed meetings of directors or committees of directors at which a quorum is present or by resolution in writing, signed by all the directors entitled to vote on that resolution at a meeting of directors or a committee of directors. A copy of every such resolution in writing shall be kept with the minutes of the proceedings of the directors or committee of directors.

4.04 Number - Until changed in accordance with the Act, the board shall consist of that number of directors, being a minimum of 1 and a maximum of 10, as determined from time to time by special resolution or, if the special resolution empowers the directors to determine a number, by the resolution of the board.

4.05 Meetings by Telephone or Electronic Facilities - If all the directors present at or participating in the meeting consent, any director may participate in a meeting of the board or of a committee of the board by means of such telephone, electronic or other communication facilities as permit all persons participating in the meeting to communicate with each other simultaneously and instantaneously, and a director participating in such meeting by such means is deemed for the purposes of the Act and this by-law to be present at that meeting. A consent pursuant to this provision may be given before or after the meeting to which it relates and may be a "blanket" consent, relating to all meetings of the board and/or committees of the board.

4.06 Calling of Meetings - Meetings of the board shall be held from time to time at such place, at such time and on such day as the chairman of the board, the managing director, the president or a vice-president who is a director or any two directors may determine, and the secretary shall call meetings when directed or authorized by the president or by a vice-president who is a director or by any two directors. Notice of every meeting so called shall be given to each director not less than 48 hours (excluding any part of a Sunday and of a holiday as defined by the *Interpretation Act*) before the time when the meeting is to be held, except that no notice of meeting shall be necessary if all the directors are present and if those absent have waived notice of or otherwise signified their consent to the holding of such meeting. A notice of a meeting of directors need not specify the purpose of or the business to be transacted at the meeting except where the Act requires such purpose or business to be specified.

4.07 First Meeting of New Board - Each newly elected board of directors may without notice hold its first meeting immediately following the meeting of shareholders at which such board was elected if a quorum of directors is present.

4.08 Adjourned Meetings - Notice of an adjourned meeting of the board is not required if the time and place of the adjourned meeting is announced at the original meeting.

4.09 Regular Meetings - The board may appoint a day or days in any month or months for regular meetings at a place and hour to be named. A copy of any resolution of the board fixing the place and time of regular meetings of the board shall be sent to each director forthwith after being passed, but no other notice shall be required for any such regular meeting, except where the Act requires the purpose thereof or the business to be transacted thereat to be specified.

4.10 Quorum - Subject to any unanimous shareholder agreement, the quorum for the transaction of business at any meeting of the board shall consist of a majority of the number of directors.

4.11 Chairman - The chairman of any meeting of the board shall be the first mentioned of such of the following officers as have been appointed and who is a director and is present at the meeting:

- (i) Chairman of the Board;
- (ii) Managing Director;

- (iii) President; or
- (iv) a Vice-President who is a director; or
- (v) Corporate Secretary.

If no such officer is present, the directors present shall choose one of their numbers to be chairman.

4.12 Votes to Govern - At all meetings of the board, every question shall be decided by a majority of the votes cast on the question.

4.13 Casting Vote - In the case of an equality of votes on any question at a meeting of the board, the chairman of the meeting shall not be entitled to a second or casting vote.

4.14 Disclosure of Interests in Contracts - Every director or officer of the Corporation who is a party to, or who is a director or officer of or has a material interest in any person who is a party to, a material contract or transaction, or a proposed material contract or transaction with the Corporation shall disclose in writing to the Corporation or request to have entered in the minutes of the meeting of directors the nature and extent of his interest as required by the Act. Any such contract or transaction or proposed contract or transaction shall, except as provided by the Act, be referred to the board or shareholders for approval, and a director interested in a contract or transaction or proposed contract or transaction so referred to the board shall not vote on any resolution to approve same except as provided by the Act.

4.15 Resolution in Lieu of Meeting - A resolution in writing, signed by all the directors entitled to vote on that resolution at a meeting of directors or a committee of directors, is as valid as if it had been passed at a meeting of directors or a committee of directors. A copy of every such resolution shall be kept with the minutes of the proceedings of the directors or committee of directors.

4.16 Remuneration and Expenses - Subject to the articles or any unanimous shareholder agreement, the directors shall be paid such remuneration for their services as the board may from time to time determine. The directors shall also be entitled to be reimbursed for travelling and other expenses properly incurred by them in attending meetings of the board or any committee thereof. Nothing herein contained shall preclude any director from serving the Corporation in any other capacity and receiving remuneration therefor.

5. DELEGATION

5.01 Managing Director and Committee of Directors - The board may appoint from their number a managing director who is a resident Canadian or a committee of directors, and delegate to such managing director or committee any of the powers of the board except those which, under the Act, a managing director or committee of directors has no authority to exercise. A majority of the members of such committee shall be resident Canadians.

5.02 Transaction of Business - The powers of a committee of directors may be exercised by a meeting at which a quorum is present or by resolution in writing signed by all the members of such committee who would have been entitled to vote on that resolution at a meeting of the committee. Meetings of such committee may be held at any place within or without Ontario.

5.03 Procedure - Unless otherwise determined by the board, each committee shall have the power to fix its quorum at not less than a majority of its members, to elect its chairman and to regulate its procedure. To the extent that the committee does not establish rules to regulate its procedure, the provisions of this by-law applicable to meetings of the board shall apply mutatis mutandis.

6. OFFICERS

6.01 Appointment - Subject to any unanimous shareholder agreement, the board may from time to time appoint a president, one or more vice-presidents (to which title may be added words indicating seniority or function), a secretary, a treasurer and such other officers as the board may determine, including one or more assistants to any of the officers so appointed. The board may specify the duties of and, in accordance with this by-law and subject to the provisions of the Act, delegate to such officers powers to manage the business and affairs of the Corporation.

6.02 Terms of Employment, Duties and Remuneration - The terms of employment and remuneration of all officers elected or appointed by the board shall be determined from time to time and may be varied from time to time by the board.

6.03 Chairman of the Board - The board may from time to time also appoint a chairman of the board who shall be a director. If appointed, the board may assign to him any of the powers and duties that may by any provisions of this by-law be delegated to the managing director or to the president; and he shall, subject to the provisions of the Act, the articles or any unanimous shareholder agreement, have such other powers and duties as the board may specify. During the absence or disability of the chairman of the board, his duties shall be performed and his powers exercised by the managing director, if any, or by the president.

6.04 President - If appointed, the president shall in the absence of a chairman of the board of directors, be the chief executive officer and otherwise shall be the chief operating officer and, subject to the authority of the board, shall have general supervision of the business of the Corporation; and he shall have such other powers and duties as the board may specify. He shall, if present, preside at all meetings of the shareholders and of the directors. During the absence or disability of the managing director, or if no managing director has been appointed, the president shall also have the powers and duties of that office.

6.05 Vice-President - The vice-president, or if there are more than one, the vice-presidents in order of seniority (as determined by the board) shall be vested with all the powers and shall perform all the duties of the president in the absence or disability or refusal to act of the president, except that he shall not preside at meetings of the directors or shareholders unless he is qualified to attend meetings of directors or shareholders as the case may be. If a vice-president exercises any such duty or power, the absence or inability of the president shall be presumed with reference thereto. A vice-president shall also perform such duties and exercise such powers as the chief executive officer may from time to time delegate to him or the board may prescribe.

6.06 Secretary - The secretary shall attend and be the secretary of all meetings of the board, shareholders and committees of the board and shall enter or cause to be entered in records kept for that purpose minutes of all proceedings thereat; he shall give or cause to be given, as and when instructed all notices to shareholders, directors, officers, auditors and members of committees of the board; he shall be custodian of all books, papers, records, documents and instruments belonging to the Corporation, except when some other officer or agent has been appointed for that purpose; and he shall have such other powers and duties as the board or the chief executive officer may specify.

6.07 Treasurer - The treasurer shall keep proper accounting records in compliance with the Act and shall be responsible for the deposit of money, the safekeeping of securities and the disbursement of the funds of the Corporation; he shall render to the board whenever required an account of all his transactions as treasurer and of the financial position of the Corporation; and he shall have such other powers and duties as the board or the chief executive officer may specify.

6.08 Powers and Duties of Other Officers - The powers and duties of all other officers shall be such as the terms of their engagement call for or as the board or the chief executive officer may specify. Any of the powers and duties of an officer to whom an assistant has been appointed may be exercised and performed by such assistant, unless the board or the chief executive officer otherwise directs.

6.09 Variation of Powers and Duties - The board may from time to time and subject to the provisions of the Act, vary, add to or limit the powers and duties of any officer.

6.10 Term of Office - The board, in its discretion, may remove any officer of the Corporation, without prejudice to such officer's rights under any employment contract. Otherwise each officer appointed by the board shall hold office until his successor is appointed.

6.11 Disclosure - Conflict of Interest - An officer shall have the same duty to disclose his interest in a material contract or transaction or proposed material contract or transaction with the Corporation, as is, pursuant to the provisions of the Act and the by-laws, imposed upon the directors.

7. PROTECTION OF DIRECTORS, OFFICERS AND OTHERS

7.01 Standard of Care - Every director and officer of the Corporation in exercising his powers and discharging his duties shall act honestly and in good faith with a view to the best interests of the Corporation and shall exercise care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. Every director and officer of the Corporation shall comply with the Act, the regulations, articles, by-laws and any unanimous shareholder agreement.

7.02 Limitation of Liability - Every director and officer of the Corporation in exercising his or her powers and discharging his or her duties shall act honestly and in good faith with a view to the best interest of the Corporation and exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. Subject to the foregoing, no director or officer of the Corporation shall be liable for:

- (i) the acts, omissions, failures, neglects or defaults of any other director, officer or employee,
- (ii) joining in any act for conformity,
- (iii) any loss, damage or expense suffered or incurred by the Corporation through the insufficiency or deficiency of title to any property acquired by the Corporation or for or on behalf of the Corporation,
- (iv) the insufficiency or deficiency of any security in or upon which any of the monies of the Corporation shall be invested,
- (v) any loss or damage arising from the bankruptcy, insolvency or tortious acts of any person with whom any of the monies, securities or effects of the Corporation shall be deposited,
- (vi) any loss occasioned by any error of judgment or oversight on the part of such director or officer, or
- (vii) any other loss, damage or misfortune which may happen in the execution of the duties of the office of such director or officer in relation thereto,

PROVIDED, however, that nothing herein shall relieve any director or officer from the duty to act in accordance with the Act and the regulations thereunder or from liability for any breach thereof.

7.03 Indemnity of Directors and Officers - Subject to the Act, the Corporation shall indemnify a director or officer of the Corporation, a former director or officer of the Corporation or a person who acts or acted at the Corporation's request as a director or officer of a body corporate of which the Corporation is or was a shareholder or creditor, and his heirs and legal representatives, against all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by him in respect of any civil, criminal or administrative action or proceeding to which he is made a party by reason of being or having been a director or officer of such corporation or body corporate if,

- (i) he acted honestly and in good faith with a view to the best interests of the Corporation; and
- (ii) in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, he had reasonable grounds for believing that his conduct was lawful.

The Corporation shall indemnify such person in all such other matters, actions, proceedings and circumstances as may be permitted by the Act or the law.

7.04 Insurance - The Corporation may purchase and maintain insurance for the benefit of any person referred to in Section 6.02 of this by-law against any liability incurred by him:

- (a) in his capacity as a director, officer or otherwise, except where the liability relates to his failure to act honestly and in good faith with a view to the best interests of the Corporation and/or such body corporate; or
- (b) in his capacity as a director, officer or otherwise, of another body corporate where he acts or acted in that capacity at the Corporation's request, except where the liability relates to his failure to act honestly and in good faith with a view to the best interests of the body corporate.

8. MEETINGS OF SHAREHOLDERS

8.01 Annual Meetings - The annual meeting of shareholders shall be held at such time in each year and, subject to Section 8.03, at such place as the board, the chairman of the board, the managing director or the president may from time to time determine, for the purpose of considering the financial statements and reports required by the Act to be placed before the annual meeting, electing directors, appointing auditors and for the transaction of such other business as may properly be brought before the meeting.

8.02 Special Meetings - The board, the chairman of the board, the managing director or the president shall have power to call a special meeting of the shareholders at any time.

8.03 Place of Meetings - Meetings of shareholders shall be held at the registered office of the Corporation or elsewhere in the municipality in which the registered office is situate or, if the board shall so determine, at some other place in or outside Canada.

8.04 Notice of Meetings — Subject to the articles and unless the unanimous shareholders agreement specifies otherwise, the notice of the time and place of each meeting of shareholders shall be given in the manner provided in Section 11.01 not less than ten (10) nor more than fifty (50) days before the date of the meeting to each director, to the auditor and to each shareholder who at the close of business on the record date, if any, for notice is entered in the securities register as the holder of one or more shares carrying the right to vote at the meeting. Notice of a meeting of shareholders called for any purpose other than consideration of financial statements and auditor's report, election of directors and reappointment of the incumbent auditor shall state the nature of such business in sufficient detail to permit the shareholder to form a reasoned judgment thereon and shall state the text of any special resolution to be submitted to the meeting. A shareholder may in any manner waive notice of or otherwise consent to a meeting of shareholders.

8.05 List of Shareholders Entitled to Notice - For every meeting of shareholders, the Corporation shall prepare a list of shareholders entitled to receive notice of the meeting, arranged in alphabetical order and showing the number of shares entitled to vote at the meeting held by each shareholder. If a record date for the meeting is fixed pursuant to Section 8.06, the shareholders listed shall be those registered at the close of business on a day not later than ten (10) days after such record date. If no record date is fixed, the shareholders listed shall be those registered at the close of business on the day immediately preceding the day on which notice of the meeting is given, or where no such notice is given, the day on which the meeting is held. The list shall be available for examination by any shareholder during usual business hours at the registered office of the Corporation or at a place where the securities register is kept and at the place where the meeting is held.

8.06 Record Date for Notice - The board may fix in advance a record date, preceding the date of any meeting of shareholders by not more than fifty (50) days and not less than twenty-one (21) days, for the determination of the shareholders entitled to notice of the meeting, provided that notice of any such record date is given not less than seven (7) days before such record date, in the manner provided in the Act. If no record date is so fixed, the record date for the determination of the shareholders entitled to notice of the meeting shall be the close of business on the day immediately preceding the day on which the notice is given.

8.07 Waiving Notice - A shareholder and any other person entitled to attend a meeting of shareholders may in any manner and at any time waive notice of a meeting of shareholders, and attendance of any such person at a meeting of shareholders is a waiver of notice of meeting, except where such person attends a meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called.

8.08 Meetings Without Notice - A meeting of shareholders may be held without notice at any time and place permitted by the Act:

- (a) if all the shareholders entitled to vote thereat are present in person or represented by proxy or if those not present or represented by proxy waive notice of or otherwise consent to such meeting being held; and
- (b) if the auditors and the directors are present or waive notice of or otherwise consent to such meeting being held. At such a meeting any business may be transacted which the Corporation at a meeting of shareholders may transact.

8.09 Chairman, Secretary and Scrutineers - The chairman of any meeting of shareholders shall be the first mentioned of such of the following officers as have been appointed and who is present at the meeting: president, managing director, chairman of the board or a vice-president who is a shareholder. If no such officer is present within fifteen (15) minutes from the time fixed for holding the meeting, the persons present and entitled to vote shall choose one of their number to be chairman. If the secretary of the Corporation is absent, the chairman shall appoint some person, who need not be a shareholder, to act as secretary of the meeting. If desired, one or more scrutineers, who need not be shareholders, may be appointed by a resolution or by the chairman with the consent of the meeting.

8.10 Persons Entitled to be Present - Subject to the articles, the only persons entitled to be present at a meeting of the shareholders shall be those entitled to vote thereat, the directors and auditors of the Corporation and others who, although not entitled to vote, are entitled or required under any provision of the Act or the articles or by-laws to be present at the meeting. Any other person may be admitted only on the invitation of the chairman of the meeting or with the consent of the meeting.

8.11 Quorum - Subject to any unanimous shareholder agreement, a quorum for the transaction of business at any meeting of shareholders shall be one or more persons present in person or represented by proxy holding at least 25% of the outstanding shares of the Corporation entitled to vote at the meeting and a meeting shall not continue with the transaction of any business in absence of a quorum.

8.12 Right to Vote - Subject to the provisions of the Act and any unanimous shareholder agreement, as to authorized representatives of any other body corporate, at any meeting of shareholders in respect of which the Corporation has prepared the list referred to in section 8.05, every person who is named in such list shall be entitled to vote the shares shown thereon opposite his name except, where the Corporation has fixed a record date in respect of such meeting pursuant to section 8.06, to the extent that such person has transferred any of his shares after such record date and the transferee, upon producing properly endorsed certificates evidencing such shares or otherwise establishing that he owns such shares, demands not later than ten (10) days before the meeting that his name be included to vote the transferred shares at the meeting. In the absence of a list prepared as aforesaid in respect of a meeting of shareholders, every person shall be entitled to vote at a meeting who at the time is entered in the securities register as the holder of one or more shares carrying the right to vote at such meeting.

8.13 Proxies - Every shareholder entitled to vote at a meeting of shareholders may appoint a proxyholder, or one or more alternate proxyholders, who need not be shareholders, to attend and act at the meeting in the manner and to the extent authorized and with the authority conferred by the proxy. A proxy shall be in writing executed by the shareholder or his attorney and shall conform with the requirements of the Act.

8.14 Time for Deposit of Proxies - The board may specify in a notice calling a meeting of shareholders a time, preceding the time of such meeting by not more than forty-eight (48) hours exclusive of non-business days, before which time proxies to be used at such meeting must be deposited. A proxy shall be acted upon only if, prior to the time so specified, it shall have been deposited with the Corporation or an agent thereof specified in such notice or, if no such time is specified in such notice, unless it has been received by the secretary of the Corporation or by the chairman of the meeting or any adjournment thereof prior to the time of voting.

8.15 Joint Shareholders - If two (2) or more persons hold shares jointly, any one of them present or represented by proxy at a meeting of shareholders may, in the absence of the other or others, vote the shares; but if two (2) or more of those persons are present in person or represented by proxy and vote, they shall vote as one on the shares jointly held by them.

8.16 Votes to Govern - At any meeting of shareholders every question shall, unless otherwise required by the articles or by-laws or by law, and any unanimous shareholder agreement, be determined by the majority of the votes cast on the question. In case of an equality of votes either upon a show of hands or upon a poll, the chairman of the meeting shall not be entitled to a second or casting vote.

8.17 Show of Hands - Subject to the provisions of the Act, any question at a meeting of shareholders shall be decided by a show of hands unless a ballot thereon is required or demanded as hereinafter provided. Upon a show of hands every person who is present and entitled to vote shall have one vote. Whenever a vote by show of hands shall have been taken upon a question, unless a ballot thereon is so required or demanded, a declaration by the chairman of the meeting that the vote upon the question has been carried or carried by a particular majority or not carried and an entry to that effect in the minutes of the meeting shall be prima facie evidence of the fact without proof of the number or proportion of the votes recorded in favour of or against any resolution or other proceeding in respect of the said question, and the result of the vote so taken shall be the decision of the shareholders upon the said question.

8.18 Ballots - On any question proposed for consideration at a meeting of shareholders, and whether or not a show of hands has been taken thereon, any shareholder or proxyholder entitled to vote at the meeting may require or demand a ballot. A ballot so required or demanded shall be taken in such manner as the chairman shall direct. A requirement or demand for a ballot may be withdrawn at any time prior to the taking of the ballot. If a ballot is taken each person present shall be entitled, in respect of the shares which he is entitled to vote at the meeting upon the question, to that number of votes provided by the Act or the articles, and the result of the ballot so taken shall be the decision of the shareholders upon the said question.

8.19 Adjournments - If a meeting of shareholders is adjourned for less than thirty (30) days, it shall not be necessary to give notice of the adjourned meeting, other than by announcement at the earliest meeting that is adjourned. If a meeting of shareholders is adjourned by one or more adjournments for an aggregate of thirty (30) days or more, notice of the adjourned meeting shall be given as for an original meeting.

8.20 Resolution in Writing - A resolution in writing signed by all of the shareholders entitled to vote on that resolution at a meeting of shareholders is as valid as if it had been passed at a meeting of the shareholders unless a written statement or representation with respect to the subject matter of the resolution is submitted by a director or the auditors in accordance with the Act.

8.21 Only One Shareholder - Where the Corporation has only one shareholder or only one holder of any class or series of shares the shareholder present in person or by proxy constitutes a meeting.

8.22 Advance Notice of Director Nominations

- (a) Subject to Section 8.22(b), nominations of persons for election as directors at a meeting of shareholders may be made only:
 - (i) by or at the direction of the Board;
 - (ii) pursuant to a proposal (as defined in the Act) or a requisition of a meeting of shareholders, in each case made in accordance with the Act; or
 - (iii) by a Nominating Shareholder who delivers a Nomination Notice to the Corporation within the Nomination Window by personal delivery to the Corporation's registered office addressed to the Chief Executive Officer or by fax or email (at the fax number or email address as stipulated from time to time by the Corporation under its profile on SEDAR at www.sedar.com).
- (b) The Board may, prior to any meeting of shareholders, in its sole discretion, waive any requirement in this Section 8.22. Unless waived by the Board, a Nomination Window will not be changed by any adjournment or postponement of a meeting of shareholders, or the announcement of any adjournment or postponement.

(c) For the purposes this Section 8.22, the following terms have the following meanings:

- (i) **“Local Time”** means the local time at the Corporation’s registered office.
- (ii) **“Meeting Announcement Date”**, in respect of a meeting of shareholders, means the date of the first public filing or announcement of the date of that meeting.
- (iii) **“Nomination Notice”** means a written notice that sets out:
 - (A) all information that would be required to be disclosed, under the Act and applicable securities laws, in a dissident proxy circular in connection with solicitations of proxies for the election of directors relating to a Nominating Shareholder (as if that Nominating Shareholder were a dissident soliciting proxies) and each person whom that Nominating Shareholder proposes to nominate for election as a director;
 - (B) the class and number of shares of the Corporation held, directly or indirectly, by or on behalf of that Nominating Shareholder;
 - (C) confirmation that the proposed nominees meet the qualifications of directors set out in the Act;
 - (D) information on the residency of each proposed nominee, for the purposes of determining whether the residency requirements set out in the Act will be met; and
 - (E) confirmation as to whether each proposed nominee is independent for the purposes of National Instrument 52-110.
- (iv) **“Nominating Shareholder”**, in respect of a meeting of shareholders, means a person who is a registered or beneficial holder of one or more shares of the Corporation carrying the right to vote on the election of directors at that meeting as of:
 - (A) the record date for notice for that meeting; and
 - (B) the date on which the Nomination Notice is delivered to the Corporation.
- (v) **“Nomination Window”**, in respect of a meeting of shareholders, means:
 - (A) in the case of an annual meeting:
 - (1) if that meeting is called for a date that is fewer than 50 days following the Meeting Announcement Date, the period starting at 9:00 a.m. (Local Time) on the Meeting Announcement Date and ending at 5:00 p.m. (Local Time) on the 10th day following the Meeting Announcement Date; and
 - (2) otherwise, the period starting at 9:00 a.m. (Local Time) on the date that is 65 days prior to the date of that meeting and ending at 5:00 p.m. (Local Time) on the date that is 30 days prior to the date of that meeting; or
 - (B) in the case of a special meeting (which is not also an annual meeting) called for the purpose of electing directors (whether or not called for other purposes), the

period starting at 9:00 a.m. (Local Time) on the Meeting Announcement Date and ending at 5:00 p.m. (Local Time) on the 15th day following the Meeting Announcement Date.

9. SHARES

9.01 **Allotment** - Subject to the Act, the articles and any unanimous shareholder agreement, the board may from time to time allot or grant options to purchase the whole or any part of the authorized and unissued shares of the Corporation at such times and to such persons and for such consideration as the board shall determine, provided that no share shall be issued until it is fully paid as prescribed by the Act.

9.02 **Commissions** - The board may from time to time authorize the Corporation to pay a commission to any person in consideration of his purchasing or agreeing to purchase shares in the Corporation, whether from the Corporation or from any other person, or procuring or agreeing to procure purchasers for any such shares.

9.03 **Registration of Transfer** - Subject to the provisions of the Act, the articles and any unanimous shareholder agreement, no transfer of shares shall be registered in a securities register except upon presentation of the certificate representing such shares with a transfer endorsed thereon or delivered therewith duly executed by the registered shareholder or by his attorney or successor duly appointed, or if uncertificated securities with a duly executed stock transfer, together with such reasonable assurance or evidence of signature, identification and authority to transfer as the board may from time to time prescribe, upon payment of all applicable taxes and any fees prescribed by the board, upon compliance with such restrictions on transfer as are authorized by the articles and upon satisfaction of any lien referred to in section 10.05.

9.04 **Transfer Agents and Registrars** - The board may from time to time appoint a registrar to maintain the securities register and a transfer agent to maintain the register of transfers and may also appoint one or more branch registrars to maintain branch securities registers of transfers, but one person may be appointed both registrar and transfer agent. The board may at any time terminate any such appointment.

9.05 **Lien on Shares** - Subject to the Act, and any unanimous shareholder agreement, the Corporation has a lien on any share or shares registered in the name of the shareholder or his legal representative for any debt of that shareholder to the Corporation.

9.06 **Enforcement of Lien** - The lien referred to in the preceding section may be enforced by any means permitted by law and:

- (a) where the shares are redeemable pursuant to the articles of the Corporation by redeeming such share or shares and applying the redemption price to the debt;
- (b) subject to the Act, by purchasing the share or shares for cancellation for a price equal to the book value of such share or shares and applying the proceeds to the debt;
- (c) by selling the share or shares to any third party whether or not such party is at arms length to the Corporation, and including, without limitation, any officer or director of the Corporation for the best price which the directors consider to be obtainable for such share or shares; or
- (d) by refusing to register a transfer of such share or shares until the debt is paid.

9.07 Share Certificates - Except where the board has resolved to have uncertificated securities pursuant to Section 54(2) of the Act, every holder of one or more shares of the Corporation shall be entitled, at his option, to a share certificate, or to a non-transferable written acknowledgement of his right to obtain a share certificate, stating the number and class or series of shares held by him as shown on the securities register. Share certificates and acknowledgements of a shareholder's right to a share certificate, respectively, shall be in such form as the board shall from time to time approve. Unless the board otherwise determines, certificates representing shares in respect of which a transfer agent and/or registrar has been appointed shall not be valid unless countersigned by or on behalf of such transfer agent and/or registrar. A share certificate shall be signed manually by at least one director or officer of the Corporation or on behalf of the transfer agent and/or registrar. Any additional signatures required may be printed or otherwise mechanically reproduced. A share certificate executed as aforesaid shall be valid notwithstanding that one of the directors or officers whose facsimile signature appears thereon no longer holds office at the date of issue of the certificate.

9.08 Replacement of Share Certificates - The board or any officer or agent designated by the board may in its or his discretion direct the issue of a new share certificate in lieu of and upon cancellation of a share certificate that has been mutilated or in substitution for a share certificate claimed to have been lost, destroyed or wrongfully taken on payment of such fee and on such terms as to indemnity, reimbursement of expenses and evidence of loss and of title as the board may from time to time prescribe, whether generally or in any particular case.

9.09 Joint Shareholders - If two (2) or more persons are registered as joint holders of any share, the Corporation shall not be bound to issue more than one certificate in respect thereof, and delivery of such certificate to one of such persons shall be sufficient delivery to all of them. Any one of such persons may give effectual receipts for the certificate issued in respect thereof or for any dividend, bonus, return of capital or other money payable or warrant issuable in respect of such share.

9.10 Deceased Shareholders - In the event of the death of a holder, or of one of the joint holders, of any share, the Corporation shall not be required to make any entry in the securities register in respect thereof or to make payment of any dividends thereon except upon production of all such documents as may be required by law and upon compliance with the reasonable requirements of the Corporation and its transfer agents.

10. DIVIDENDS AND RIGHTS

10.01 Dividends - Subject to the provisions of the Act, the articles and any unanimous shareholder agreement, the board may from time to time declare dividends payable to the shareholders according to their respective rights and interests in the Corporation. Dividends may be paid in money or property or by issuing fully paid shares of the Corporation or rights to acquire fully paid shares of the Corporation.

10.02 Dividend Cheques - A dividend payable in cash shall be paid by cheque drawn on the Corporation's bankers or one of them to the order of each registered holder of shares of the class or series in respect of which it has been declared and mailed by prepaid ordinary mail to such registered holder at his recorded address, unless such holder otherwise directs. In the case of joint holders the cheque shall, unless such joint holders otherwise direct, be made payable to the order of all of such joint holders and mailed to them at their recorded address. The mailing of such cheque as aforesaid, unless the same is not paid on due presentation, shall satisfy and discharge the liability for the dividend to the extent of the sum represented thereby plus the amount of any tax which the Corporation is required to and does withhold.

10.03 Non-Receipt of Cheques - In the event of non-receipt of any dividend cheque or a claim that such a cheque was defaced, lost, stolen or destroyed by the person to whom it is sent as aforesaid, the Corporation shall issue to such person a replacement cheque for a like amount on such terms as to indemnity, reimbursement of expenses and evidence of non-receipt and of title as the board may from time to time prescribe, whether generally or in any particular case.

10.04 Record Date of Dividends and Rights — Subject to any unanimous shareholder agreement, the board may fix in advance a date, preceding by not more than fifty (50) days the date for the payment of any dividend or the date for the issue of any warrant or other evidence of right to subscribe for securities of the Corporation, as a record date for the determination of the persons entitled to receive payment of such dividend or to exercise the right to subscribe for such securities, provided that notice of any such record date is given, not less than seven (7) days before such record date in the manner provided in the Act. Where no record date is fixed in advance as aforesaid, the record date for the determination of persons entitled to receive payment of any dividend or to exercise the right to subscribe for securities of the Corporation shall be at the close of business on the day on which the resolution relating to such dividend or right to subscribe is passed by the board.

10.05 Unclaimed Dividends - Any dividend unclaimed after a period of six (6) years from the date on which the same has been declared to be payable shall be forfeited and shall revert to the Corporation.

11. NOTICES

11.01 Method of Giving Notice - Any notice (which term includes any communication or document) to be given (which term includes sent, delivered or served) pursuant to the Act, the regulations thereunder, the articles, the by-laws or otherwise to a shareholder, director, officer, auditor or member of a committee of the board shall be sufficiently given if delivered personally to the person to whom it is to be given or if delivered to his recorded address or if mailed to him at his recorded address by prepaid ordinary or air mail or if sent to him at his recorded address by any means of prepaid transmitted or recorded communication. A notice so delivered shall be deemed to have been given when it is delivered personally or to the recorded address as aforesaid; a notice so mailed shall be deemed to have been given when deposited in a post office or public letter box and shall be deemed to have been received on the fifth day after so depositing; and a notice so sent by any means of transmitted or recorded communication shall be deemed to have been given when dispatched or delivered to the appropriate communication company or agency or its representative for dispatch. The secretary may change or cause to be changed the recorded address of any shareholder, director, officer, auditor or member of a committee of the board in accordance with any information believed by him to be reliable.

The recorded address of a director shall be his latest address as shown in the records of the Corporation or in the most recent notice filed under the *Corporations Information Act*, whichever is the more current.

11.02 Notice to Joint Shareholders - If two (2) or more persons are registered as joint holders of any share, any notice shall be addressed to all of such joint holders but notice to one of such persons shall be sufficient notice to all of them.

11.03 Computation of Time - In computing the date when notice must be given under any provision requiring a specific number of days notice of any meeting or other event, the date of giving of notice shall be excluded and the date of the meeting or other event shall be excluded.

11.04 Undelivered Notices - If any notice given to a shareholder pursuant to section 10.01 is returned on three (3) consecutive occasions because he cannot be found, the Corporation shall not be required to give any further notices to such shareholder until he informs the Corporation in writing of his new address.

11.05 Omissions and Errors - The accidental omission to give any notice to any shareholder, director, officer, auditor or member of a committee of the board or the non-receipt of any notice by any such person or any error in any notice not affecting the substance thereof, shall not invalidate any action taken at any meeting held pursuant to such notice or otherwise founded thereon.

11.06 Persons Entitled by Death or Operation of Law - Every person who, by operation of law, transfer, death of a shareholder or any other means whatsoever, shall become entitled to any share, shall be bound by every notice in respect of such share which shall have been duly given to the shareholder from whom he derives his title to such share prior to his name and address being entered on the securities register (whether such notice was given before or after the happening of the event upon which he became so entitled) and prior to his furnishing to the Corporation the proof of authority or evidence of his entitlement prescribed by the Act.

11.07 Waiver of Notice - Any shareholder (or his duly appointed proxyholder), director, officer, auditor, or member of a committee of the board may at any time waive any notice, or waive or abridge the time for any notice, required to be given to him under any provisions of the Act, the regulations thereunder, the articles, the by-laws or otherwise and such waiver or abridgement shall cure any default in the giving or in the time of such notice, as the case may be. Any such waiver or abridgement shall be in writing except a waiver of notice of a meeting of shareholders or of the board which may be given in any manner.

12. SHAREHOLDER AGREEMENTS

12.01 Shareholder Agreements - This by-law and all other by-laws of the Corporation are subject to the terms and conditions of any agreement made by the Corporation from time to time.

ORIGINALLY ENACTED on January 19, 2017, amended by resolutions of the directors of the Corporation dated August 14, 2018 and August 27, 2018 and confirmed by Shareholders of the Corporation at the Annual and Special Meeting of Shareholders on August 28, 2018.

“David Elsley”

David Elsley - President