

# BY-LAW NO. 1

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A by-law relating generally to the transaction of the business and affairs

of

**MATRIX ENERGY TECHNOLOGIES INC.**

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

### **SECTION 1** **INTERPRETATION**

1.01 **Definitions** - In the by-laws of the Corporation, unless the context otherwise requires:

“**Act**” means the *Business Corporations Act*, R.S.A. 2000, c. B-9, and any statute that may be substituted therefor, as from time to time amended;

“**appoint**” includes “**elect**” and vice versa;

“**articles**” means the original or restated articles of incorporation, articles of amendment, articles of amalgamation, articles of continuance, articles of reorganization, articles of arrangement, articles of dissolution or articles of revival and includes an amendment to any of them;

“**Board**” means the board of directors of the Corporation;

“**by-laws**” means this by-law and all other by-laws of the Corporation from time to time in force and effect;

“**Corporation**” means the corporation incorporated by a Certificate of Incorporation under the Act and named:

**- MATRIX ENERGY TECHNOLOGIES INC. -**

“**meeting of shareholders**” means an annual meeting of shareholders and a special meeting of shareholders;

“**non-business day**” means Saturday, Sunday and any other day that is a holiday as defined in *The Interpretation Act*, 2000, c. 1-8 and any statute that may be substituted therefor, as from time to time amended;

“**recorded address**” means in the case of a shareholder his address as recorded in the securities register of the Corporation; and in the case of joint shareholders the address appearing in the securities register in respect of such joint holding or the first address so appearing if there are more than one; and in the case of a director, officer, auditor or member of a committee of the Board, his latest address as recorded in the records of the Corporation;

“**signing officer**” means, in relation to any instrument, any person authorized to sign the same on behalf of the Corporation by section 2.02 or by a resolution passed pursuant thereto;

“**special meeting of shareholders**” means a special meeting of all shareholders entitled to vote at an annual meeting of shareholders; and

“**unanimous shareholder agreement**” means (i) a written agreement to which all the shareholders of a corporation are or are deemed to be parties, whether or not any other person is also a party, or (ii) a written declaration by a person who is the beneficial owner of all of the issued shares of a corporation that provides for any matters enumerated in the Act, as amended from time to time;

save as aforesaid, words and expressions defined in the Act have the same meanings when used herein; and words importing the singular number include the plural and vice versa; words importing gender include the masculine, feminine and neuter genders; and words importing persons include individuals, bodies corporate, partnerships, trusts and unincorporated organizations.

**SECTION 2**  
**BUSINESS OF THE CORPORATION**

2.01 **Registered Office** - Until changed in accordance with the Act, the registered office of the Corporation shall be at the City of Calgary in the Province of Alberta and at such location therein as the Board may from time to time determine.

2.02 **Execution of Instruments** - Contracts, documents or instruments in writing requiring execution by the Corporation may be signed by any two persons, one of whom holds the office of Chairman of the Board, President, Chief Executive Officer, Chief Financial Officer, Managing Director, Vice-President Or Director and the other of whom holds one of the said offices or the office of Secretary, Treasurer, Assistant-Secretary or Assistant-Treasurer or any other office created by by-law or resolution of the board; and all contracts, documents or instruments in writing so signed shall be binding upon the Corporation without any further authorization or formality. The Board is authorized from time to time by resolution to appoint any officer or officers or any other person or persons on behalf of the Corporation to sign and deliver either contracts, documents or instruments in writing generally or to sign either manually or by facsimile signature and/or counterpart signature and deliver specific contracts, documents or instruments in writing. The term “contracts, documents or instruments in writing” as used in this by-law shall include deeds, mortgages, charges, conveyances, powers of attorney, transfers and assignments of property of all kinds (including specifically, but without limitation, transfers and assignments of shares, warrants, bonds, debentures or other securities), share certificates, warrants, bonds, debentures and other securities or security instruments of the Corporation and all paper writings.

2.03 **Banking Arrangements** - The banking business of the Corporation including, without limitation, the borrowing of money and the giving of security therefor, shall be transacted with such banks, trust companies or other bodies corporate or organizations as may from time to time be designated by or under the authority of the Board. Such banking business or any part thereof shall be transacted under such agreements, instructions and delegations of powers as the Board may from time to time prescribe or authorize.

2.04 **Voting Rights in Other Bodies Corporate** - The signing officers of the Corporation may execute and deliver proxies and arrange for the issuance of voting certificates or other evidence of the right to exercise the voting rights attaching to any securities held by the Corporation. Such instruments, certificates or other evidence shall be in favour of such person or persons as may be determined by the officers executing such proxies or arranging for the issuance of voting certificates or such other evidence of the right to exercise such voting rights. In addition, the Board may from time to time direct the manner in which and the person or persons by whom any particular voting rights or class of voting rights may or shall be exercised.

2.05 **Withholding Information from Shareholders** - Subject to the provisions of the Act, no shareholder shall be entitled to discovery of any information respecting any details or conduct of the Corporation's business which, in the opinion of the Board, it would be inexpedient in the interests of the shareholders or the Corporation to communicate to the public. The Board may from time to time determine whether and to what extent and at what time and place and under what conditions or regulations the accounts, records and documents of the Corporation or any of them shall be open to the inspection of shareholders and no shareholder shall have any right of inspecting any account, record or document of the Corporation except as conferred by the Act or authorized by the Board or by resolution passed at a general meeting of shareholders.

### **SECTION 3** **BORROWING AND SECURITIES**

3.01 **Borrowing Power** - Without limiting the borrowing powers of the Corporation as set forth in the Act, the articles, the by-laws or any unanimous shareholder agreement, the Board may from time to time:

- (a) borrow money upon the credit of the Corporation;

- (b) issue, reissue, sell or pledge debt obligations of the Corporation;
- (c) subject to the provisions of the Act give a guarantee on behalf of the Corporation to secure performance of an obligation of any person; and
- (d) mortgage, hypothecate, pledge or otherwise create an interest in or charge upon all or any property of the Corporation, owned or subsequently acquired, to secure any obligation of the Corporation.

Nothing in this section limits or restricts the borrowing of money by the Corporation on bills of exchange or promissory notes made, drawn, accepted or endorsed by or on behalf of the Corporation.

3.02 **Delegation** - The Board may from time to time delegate to such one or more of the directors and officers of the Corporation as may be designated by the Board all or any of the powers conferred on the Board by section 3.01 or by the Act to such extent and in such manner as the Board shall determine at the time of each such delegation.

## **SECTION 4** **DIRECTORS**

4.01 **Number of Directors and Quorum** - Until changed in accordance with the Act, the Board shall consist of not fewer than three (3) and not more than eleven (11) directors. Subject to section 4.08, the quorum for the transaction of business at any meeting of the Board shall consist of a majority of the number of directors then elected or appointed, or such greater or lesser number of directors as the Board may from time to time determine.

4.02 **Qualification** - No person shall be qualified for election as a director if he (i) is less than 18 years of age; (ii) is a dependent adult as defined in *The Dependent Adults Act* or is the subject of a certificate of incapacity under that Act and any statute that may be substituted therefor, as from time to time amended; (iii) is a formal mental patient as defined in *The Mental Health Act* and any statute that may be substituted therefor, as from time to time amended; (iv) is the subject of an order under *The Mentally Incapacitated Persons Act* and any statute that may be substituted therefor, as from time to time amended, appointing a committee of his person or estate or both; (v) has been found to be a person of unsound mind by a court elsewhere than in Alberta; (vi) is not an individual; (vii) has the status of a bankrupt. Subject to the articles, a director need not be a shareholder. At least one-quarter of the directors must be resident Canadians.

4.03 **Election and Term** - The election of directors shall take place at the first meeting of shareholders and at each annual meeting of shareholders and all the directors then in office shall retire but, if qualified, shall be eligible for re-election. The number of directors to be elected at any such meeting shall be the number of directors then in office unless the directors or the shareholders otherwise determine. The election shall be by ordinary 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.

4.04 **Removal of Directors** - Subject to the provisions of the Act, the shareholders may by ordinary resolution passed at a special meeting remove any director from office and the vacancy created by such removal may be filled at the same meeting failing which it may be filled by the directors.

4.05 **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 his written resignation is sent or

delivered to the Corporation, or if a time is specified in such resignation, at the time so specified, whichever is later.

4.06 **Vacancies** - Subject to the Act, the articles and any unanimous shareholders agreement, a quorum of the Board may fill a vacancy in the Board, except a vacancy resulting from an increase in the number or minimum number of directors or from a failure of the shareholders to elect the minimum 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 minimum number of directors, the Board shall forthwith call a special meeting of shareholders to fill the vacancy. If the Board fails to call such meeting or if there are no such directors then in office, any shareholder may call the meeting.

4.07 **Action by the Board** - Subject to any unanimous shareholder agreement, the Board shall manage or supervise the management of the business and affairs of the Corporation. Subject to sections 4.08 and 4.09, the powers of the Board may be exercised by resolution passed at a meeting at which a quorum is present or by resolution in writing signed in part or in counterpart by all the directors entitled to vote on that resolution at a meeting of the Board. Where there is a vacancy in the Board, the remaining directors may exercise all the powers of the Board so long as a quorum remains in office. Where the Corporation has only one director, that director may constitute the meeting.

4.08 **Residence** - Unless otherwise permitted by the Act, the Board shall not transact business at a meeting, other than filling a vacancy in the Board, unless at least one-quarter of the directors present are resident Canadians, except where:

- (a) a resident Canadian director who is unable to be present approves in writing or by telephone or other communications facilities the business transacted at the meeting; and
- (b) the number of resident Canadian directors present at the meeting together with any resident Canadian director who gives his approval under clause (a), totals at least one-quarter of the directors present at the meeting.

4.09 **Meetings by Telephone** - If all the directors consent, a director may participate in a meeting of the Board or of a committee of the Board by electronic means, telephone or other communication facilities as permit all persons participating in the meeting to hear each other, and a director participating in such a meeting by such means is deemed to be present at the meeting. Any such consent shall be effective whether given before or after the meeting to which it relates and may be given with respect to all meetings of the Board and of committees of the Board held while a director holds office.

4.10 **Place of Meetings** - Meetings of the Board may be held at any place in or outside Canada.

4.11 **Calling of Meetings** - Meetings of the Board shall be held from time to time and at such place as the Board, the chairman of the Board, the managing director, the president or any two directors may determine.

4.12 **Notice of Meeting** - Notice of the time and place of each meeting of the Board shall be given in the manner provided in section 12.01 to each director not less than 48 hours before the time when the meeting is to be held. 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, including any proposal to:

- (a) submit to the shareholders any question or matter requiring approval of the shareholders;

- (b) appoint additional directors;
- (c) fill a vacancy among the directors or in the office of auditor;
- (d) issue securities;
- (e) declare dividends;
- (f) purchase, redeem or otherwise acquire shares issued by the Corporation;
- (g) pay a commission for the sale of shares;
- (h) approve a prospectus or management proxy circular;
- (i) approve a take-over bid circular or directors' circular;
- (j) approve any annual financial statements; or
- (k) adopt, amend or repeal by-laws.

A director may in any manner waive notice of or otherwise consent to a meeting of the Board, and attendance of a director at a meeting, constitutes a waiver of notice unless the director is attending for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called.

4.13 **First Meeting of New Board** - Provided a quorum of directors is present, each newly elected Board may without notice hold its first meeting immediately following the meeting of shareholders at which such Board is elected.

4.14 **Adjourned Meeting** - 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.

4.15 **Regular Meetings** - The Board may appoint a day or days in any month or months for regular meetings of the Board at a place and hour to be named. A copy of any resolution of the Board fixing the place and time of such regular meetings 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.

4.16 **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: chairman of the Board, managing director, president, or a vice-president. If no such officer is present, the directors present shall choose one of their number to be chairman.

4.17 **Votes to Govern** - At all meetings of the Board every question shall be decided by a majority of the votes cast on the question of those directors entitled to vote. In case of an equality of votes the chairman of the meeting shall not be entitled to a second or casting vote.

4.18 **Conflict of Interest** - A director or officer 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 material transaction or proposed material contract or proposed material transaction with the Corporation shall disclose the nature and extent of his interest at the time and in the manner provided by the Act. Any such contract or transaction or proposed contract or transaction shall be referred to the Board or shareholders for approval

in accordance with the Act, even if such contract or transaction is one that in the ordinary course of the Corporation's business would not require approval by the Board or shareholders, and a director interested in a contract or transaction so referred to the Board shall not vote on any resolution to approve the same except as provided by the Act.

4.19 **Remuneration and Expenses** - Subject to the articles and 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 in that capacity.

## **SECTION 5** **COMMITTEES**

5.01 **Committee of Directors** - Unless otherwise permitted by the Act, the Board may appoint a managing director who must be a resident Canadian or committee of directors, however designated, and delegate to such committee any of the powers of the Board except those which, under the Act, a managing director or a committee of directors has no authority to exercise. At least one-quarter of the members of such committee shall be resident Canadians.

5.02 **Transaction of Business** - Subject to the provisions of section 4.09, 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 in or outside Canada.

5.03 **Advisory Committees** - The Board may from time to time appoint such other committees as it may deem advisable, but the functions of any such other committees shall be advisory only.

5.04 **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.

5.05 **Audit Committee** - When required by the Act the Board shall, and at any other time the Board may, appoint annually from among its number an Audit Committee to be composed of not fewer than three (3) directors of whom a majority shall not be officers or employees of the Corporation or its affiliates. The Audit Committee shall have the powers and duties provided in the Act and any other powers delegated by the Board.

## **SECTION 6** **OFFICERS**

6.01 **Appointment** - Subject to the articles and any unanimous shareholder agreement, the Board may from time to time appoint a president, chief executive officer, chief financial officer, 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, the articles and any unanimous shareholder agreement, delegate to

such officers powers to manage the business and affairs of the Corporation. Subject to sections 6.02 and 6.03, an officer may but need not be a director and one person may hold more than one office.

6.02 **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 are by any provisions of this by-law assigned to the managing director or to the president; and he shall, subject to the provisions of the Act, 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.

6.03 **Managing Director** - The Board may from time to time appoint a managing director who shall be a director. If appointed, he shall have such powers and duties as the Board may specify.

6.04 **President** - If appointed, the president 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. During the absence or disability of the president, or if no president has been appointed, the managing director shall also have the powers and duties of that office.

6.05 **Vice-President** - A vice-president shall have such powers and duties as the Board or the chief executive officer may specify.

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 the custodian of the stamp or mechanical device generally used for affixing the corporate seal of the Corporation and 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 **Terms of Employment and Remuneration** - The terms of employment and the remuneration of officers appointed by the Board shall be settled by the Board from time to time.

6.12 **Conflict of Interest** - An officer shall disclose his interest in any material contract or material transaction or proposed material contract or proposed material transaction with the Corporation in accordance with section 4.18.

6.13 **Agents and Attorneys** - The Board shall have power from time to time to appoint agents or attorneys for the Corporation in or outside Canada with such powers of management or otherwise (including the power to sub-delegate) as may be thought fit.

6.14 **Fidelity Bonds** - The Board may require such officers, employees and agents of the Corporation as the Board deems advisable to furnish bonds for the faithful discharge of their powers and duties, in such form and with such surety as the Board may from time to time determine.

## **SECTION 7**

### **PROTECTION OF DIRECTORS, OFFICERS AND OTHERS**

7.01 **Limitation of Liability** - No director or officer shall be liable for the acts, receipts, neglects or defaults of any other director or officer or employee, or for joining in any receipt or other act for conformity, or for any loss, damage or expense happening to the Corporation through the insufficiency or deficiency of title to any property acquired for or on behalf of the Corporation, or for the insufficiency or deficiency of any security in or upon which any of the moneys of the Corporation shall be invested, or for any loss or damage arising from the bankruptcy, insolvency or tortious acts of any person with whom any of the moneys, securities or effects of the Corporation shall be deposited, or for any loss occasioned by any error of judgment or oversight on his part, or for any other loss, damage or misfortune whatever which shall happen in the execution of the duties of his office or in relation thereto, unless the same are occasioned by his own wilful neglect or default; provided 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.

7.02 **Indemnity** - Subject to the limitations contained in the Act, the Corporation shall indemnify a director or officer, a former director or officer, 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 (or a person who undertakes or has undertaken any liability on behalf of the Corporation or any such body corporate) 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 the Corporation or such body corporate, if

- (a) he acted honestly and in good faith with a view to the best interests of the Corporation; and
- (b) 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.

7.03 **Insurance** - Subject to the limitations contained in the Act, the Corporation may purchase and maintain such insurance for the benefit of its directors and officers as such, as the Board may from time to time determine.

**SECTION 8**  
**SHARES**

8.01 **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.

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

8.03 **Registration of Transfer** - Subject to the provisions of the Act, 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 holder or by his attorney or successor duly appointed, 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 8.5.

8.04 **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 and one or more branch transfer agents to maintain branch registers of transfers, but one person may be appointed both registrar and transfer agent. The Board may at any time terminate any such appointment.

8.05 **Lien for Indebtedness** - If the articles provide that the Corporation shall have a lien on shares registered in the name of a shareholder indebted to the Corporation, such lien may be enforced, subject to any other provision of the articles and to any unanimous shareholder agreement, by the sale of the shares thereby affected or by any other action, suit, remedy or proceeding authorized or permitted by law or by equity and, pending such enforcement, may refuse to register a transfer of the whole or any part of such shares.

8.06 **Non-recognition of Trusts** - Subject to the provisions of the Act, the Corporation shall treat as absolute owner of any share the person in whose name the share is registered in the securities register as if that person had full legal capacity and authority to exercise all rights of ownership, irrespective of any indication to the contrary through knowledge or notice or description in the Corporations records or on the share certificate.

8.07 **Security Certificates** - Every holder of one or more securities of the Corporation shall be entitled, at his option, to a security certificate, or to a non-transferable written acknowledgement of his right to obtain a security certificate, stating the number and class or series of securities held by him as shown on the securities register. Security certificates and acknowledgements of a shareholder's right to a security certificate, respectively, shall be in such form as the Board shall from time to time approve. Any security certificate shall be signed in accordance with section 2.02 and need not be under the corporate seal; provided that, unless the Board otherwise determines, certificates representing securities 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. The signature of one of the signing officers or, in the case of security certificates which are not valid unless countersigned by or on behalf of the transfer agent and/or registrar, the signatures of both signing officers, may be printed or mechanically reproduced in

facsimile upon security certificates and every such facsimile signature shall for all purposes be deemed to be the signature of the officer whose signature it reproduces and shall be binding upon the Corporation. A security certificate executed as aforesaid shall be valid notwithstanding that one or both of the officers whose facsimile signature appears thereon no longer holds office at the date of issue of the certificate.

8.08 **Replacement of Security Certificates** - The Board or any officer or agent designated by the Board may in its or his discretion direct the issue of a new security certificate in lieu of and upon cancellation of a security certificate that has been mutilated or in substitution for a security certificate claimed to have been lost, destroyed or wrongfully taken on payment of such fee, not exceeding \$3, 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.

8.09 **Joint Securityholders** - If two or more persons are registered as joint holders of any security, 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 security.

8.10 **Deceased Shareholders** - In the event of the death of a holder, or of one of the joint holders, of any security, 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.

## **SECTION 9** **DIVIDENDS AND RIGHTS**

9.01 **Dividends** - Subject to the provisions of the Act, 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.

9.02 **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.

9.03 **Non-receipt of Cheques** - In the event of non-receipt of any dividend cheque 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.

9.04 **Record Date for Dividends and Rights** - The Board may fix in advance a date, preceding by not more than 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 and if the Corporation is a distributing corporation, as defined in the Act,

provided that notice of any such record date is given, not less than 7 days before such record date, by newspaper advertisement in the manner provided in the Act. Where no record date is fixed in advance as aforesaid, the record date for the determination of the 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.

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

## **SECTION 10**

### **MEETINGS OF SHAREHOLDERS**

10.01 **Annual Meetings** - The annual meeting of shareholders shall be held at such time in each year and, subject to section 10.03, 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.

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

10.03 **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 situated or, if the Board shall so determine, at some other place in Alberta or, if all the shareholders entitled to vote at the meeting so agree, at some place outside Alberta.

10.04 **Notice of Meetings** - Notice of the time and place of each meeting of shareholders shall be given in the manner provided in section 12.01 not less than 21 nor more than 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 for notice, if any, 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 the financial statements and auditors report, election of directors and appointment of auditors 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.

10.05 **List of Shareholders Entitled to Notice** - 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 10.06, the shareholders listed shall be those registered at the close of business on a day not later than 10 days after such record date and the list shall be prepared no later than 10 days after the 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 the place where the securities register is kept and at the place where the meeting is held.

10.06 **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 50 days and not less than 21 days, for the determination of the

shareholders entitled to notice of or to vote at the meeting, provided that notice of any such record date is given, not less than 7 days before such record date, by newspaper advertisement 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 or to vote at the meeting shall be the close of business on the last business day immediately preceding the day on which the notice is sent or if no notice is sent, the day on which the meeting is held.

10.07 **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. If the meeting is held at a place outside Canada, shareholders not present or represented by proxy, but who have waived notice of or otherwise consented to such meeting, shall also be deemed to have consented to the meeting being held at such place.

10.08 **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 15 minutes from the time fixed for the commencement of 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.

10.09 **Persons Entitled to be Present** - The only persons entitled to be present at a meeting of 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.

10.10 **Quorum** - Unless and until shares of the Corporation are sold to the public, subject to the requirements of the Act, a quorum for the transaction of business at any meeting of shareholders, irrespective of the number of persons actually present at the meeting, shall be one person present in person being a shareholder entitled to vote thereat or a duly appointed representative or proxyholder for an absent shareholder so entitled, and holding or representing in the aggregate not less than a majority of the outstanding shares of the Corporation entitled to vote at the meeting.

At such time as shares of the Corporation have been sold to the public, the quorum for the transaction of business at any meeting of the shareholders shall consist of at least two persons holding or representing by proxy not less than five (5%) percent of the outstanding shares of the Corporation entitled to vote at the meeting.

If a quorum is not present at the opening of any meeting of shareholders, the shareholders present may adjourn the meeting to a fixed time and place, but may not transact any other business. If a meeting of shareholders is adjourned by one or more adjournments for an aggregate of less than 30 days it is not necessary to give notice of the adjourned meeting other than by announcement at the time of an adjournment. If a meeting of shareholders is adjourned by one or more adjournments for an aggregate of more than 29 days and not more than 90 days, notice of the adjourned meeting shall be given as for an original meeting but the management of the Corporation shall not be required to send a form of proxy in

the form prescribed by the Act to each shareholder who is entitled to receive notice of the meeting. Those shareholders present at any duly adjourned meeting shall constitute a quorum.

10.11 **Right to Vote** - Subject to the provisions of the Act 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 10.05, 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 10.06, 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 10 days before the meeting that his name be included to vote the 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 the meeting who at that time is entered in the securities register as the holder of one or more shares carrying the right to vote at such meeting.

10.12 **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.

10.13 **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 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.

10.14 **Joint Shareholders** - If two or more persons hold shares jointly, one of them present in person or represented by proxy at a meeting of shareholders may, in the absence of the other or others, vote the shares; but if two 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.

10.15 **Votes to Govern** - At any meeting of shareholders every question shall, unless otherwise required by the Act, 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.

10.16 **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 or any other manner permitted by the Act 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.

10.17 **Ballots** - On any question proposed for consideration at a meeting of shareholders, and whether or not a show of hands or other form of voting 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.

10.18 **Adjournment** - If a meeting of shareholders is adjourned for less than 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 30 days or more, notice of the adjourned meeting shall be given as for an original meeting.

10.19 **Resolution in Writing** - A resolution in writing signed in counterpart or in one instrument by all 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.

10.20 **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.

## **SECTION 11** **DIVISIONS AND DEPARTMENTS**

11.01 **Creation and Consolidation of Divisions** - The Board may cause the business and operations of the Corporation or any part thereof to be divided or to be segregated into one or more divisions upon such basis, including without limitation, character or type of operation, geographical territory, product manufactured or service rendered, as the Board may consider appropriate in each case. The Board may also cause the business and operations of any such division to be further divided into sub-units and the business and operations of any such divisions or sub-units to be consolidated upon such basis as the Board may consider appropriate in each case.

11.02 **Name of Division** - Any division or its sub-units may be designated by such name as the Board may from time to time determine and may transact business, enter into contracts, sign cheques and other documents of any kind and do all acts and things under such name. Any such contracts, cheque or document shall be binding upon the Corporation as if it had been entered into or signed in the name of the Corporation.

11.03 **Officers of Divisions** - From time to time the Board or, if authorized by the Board, the chief executive officer, may appoint one or more officers for any division, prescribe their powers and duties and settle their terms of employment and remuneration. The Board or, if authorized by the Board, the chief executive officer, may remove at its or his pleasure any officer so appointed, without prejudice to such officers rights under any employment contract. Officers of divisions or their sub-units shall not, as such, be officers of the Corporation.

**SECTION 12**  
**NOTICES**

12.01 **Method of Giving Notices** - 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 or by electronic means in accordance with the provisions of the Electronic Transactions Act. 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 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.

12.02 **Notice to Joint Shareholders** - If two 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.

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

12.04 **Undelivered Notices** - If any notice given to a shareholder pursuant to section 12.1 is returned on two 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.

12.05 **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.

12.06 **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.

12.07 **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 provision 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.

**SECTION 13**  
**EFFECTIVE DATE**

13.01 **Effective Date** - This by-law shall come into force when confirmed by the shareholders in accordance with the Act.

**MADE** by the Board of the Corporation, as evidenced by the signature hereto.

(signed) "Richard T. Ryan"

**President**

**CONFIRMED** by the Shareholders of the Corporation, as evidenced by the signature hereto.

(signed) "Richard T. Ryan"

**President**

**DATED**, this 15<sup>th</sup> day of September, 2011.