

CORPORATE ACCESS NUMBER

20738826



BUSINESS CORPORATIONS ACT

CERTIFICATE OF INCORPORATION

EMERALD BAY ENERGY INC.

WAS INCORPORATED IN ALBERTA ON MAY 9, 1997




Registrar of Corporations

BUSINESS CORPORATIONS ACT
(SECTION 6)

FORM 1

CONSUMER AND
ALBERTA CORPORATE AFFAIRS

ARTICLES OF INCORPORATION

1. NAME OF CORPORATION:

EMERALD BAY ENERGY INC.

2. THE CLASSES, AND ANY MAXIMUM NUMBER OF SHARES THAT THE CORPORATION IS AUTHORIZED TO ISSUE:

The Corporation is authorized to issue an unlimited number of Common Shares and an unlimited number of Preferred Shares, such Common and Preferred Shares having attached thereto the rights, privileges, restrictions and conditions set forth in Schedule 1 attached hereto.

3. RESTRICTIONS ON SHARE TRANSFERS (IF ANY):

None.

4. NUMBER, OR MINIMUM AND MAXIMUM NUMBER, OF DIRECTORS THAT THE CORPORATION MAY HAVE:

The Corporation may have a minimum of three (3) and a maximum of ten (10) directors.

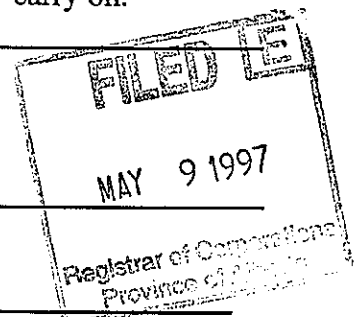
5. IF THE CORPORATION IS RESTRICTED FROM CARRYING ON A CERTAIN BUSINESS, OR RESTRICTED TO CARRYING ON A CERTAIN BUSINESS, SPECIFY THE RESTRICTION(S):

There are no restrictions on the types of business the Corporation may carry on.

6. OTHER RULES OR PROVISIONS (IF ANY):

See Schedule 2 attached hereto.

7. DATE: May 8, 1997



INCORPORATOR'S NAME

ADDRESS (INCLUDING POSTAL CODE)

SIGNATURE

RICHARD D. TINGLE

434 Scarboro Avenue S.W.
Calgary, Alberta T3C 2H6

A handwritten signature in black ink, appearing to read "R. Tingle", written over a horizontal line.

FOR DEPARTMENTAL USE ONLY
CORPORATE ACCESS NUMBER

INCORPORATION DATE

SCHEDULE 1 attached to and forming part of the Articles of Incorporation of EMERALD BAY ENERGY INC.

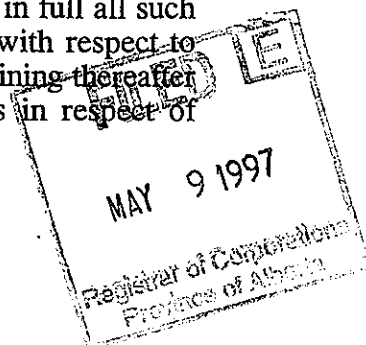
2. Common Shares

The rights of the holders of the Common Shares are equal in all respect and include the following:

- (a) to vote at all meetings of the shareholders of the Corporation, except meetings at which only holders of a specified class are entitled to vote;
- (b) subject to the rights, privileges, restrictions and conditions attaching to any other class or series of shares of the Corporation, to receive any dividend declared by the Corporation on the Common Shares; and
- (c) subject to the rights, privileges, restrictions and conditions attaching to any other class or series of shares of the Corporation, to receive the remaining property of the Corporation upon dissolution.

Preferred Shares

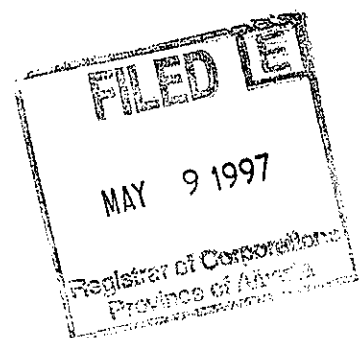
- (a) The Preferred Shares may be issued from time to time in one or more series with such rights, restrictions, privileges, conditions and designations attached thereto as shall be fixed from time to time before issuance by any resolution or resolutions providing for the issue of the shares of any series which may be passed by the board of directors of the Corporation and confirmed and declared by Articles of Amendment. Reference to one class or series of shares ranking on a parity with another class or series of shares shall mean ranking on a parity with respect to payment of dividends and distribution of assets in the event of liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary, to the extent of their respective rights in that connection.
- (b) The Preferred Shares of each series shall rank on a parity with the Preferred Shares of every other series; provided, however, that when in the case of any of such shares any cumulative dividends or amounts payable on a return of capital are not paid in full in accordance with their respective terms, the Preferred Shares of all series shall participate rateably in respect of such dividends (including all unpaid accumulated dividends which for such purpose shall be calculated as if the same were accruing up to the date of payment) in accordance with the sums which would be payable on said shares if all such dividends were declared and paid in full in accordance with their respective terms, and on any return of capital in accordance with the sums which would be payable on such return of capital if all sums so payable were paid in full in accordance with their respective terms, and provided further that in the event of there being insufficient assets to satisfy in full all such claims as aforesaid, the claims of the holders of the said shares with respect to return of capital shall first be paid and satisfied and any assets remaining thereafter shall be applied towards the payment and satisfaction of claims in respect of dividends as aforesaid.



- (c) The Preferred Shares shall be entitled to preference over the Common Shares of the Corporation and any other shares of the Corporation ranking junior to the said Preferred Shares with respect to payment of dividends and distribution of assets in the event of liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary, to the extent fixed in the case of each respective series, and may also be given such other preferences over the Common Shares of the Corporation and any other shares of the Corporation ranking junior to the said Preferred Shares as may be fixed in the case of each such series.

SCHEDULE 2 attached to and forming part of the Articles of Incorporation of EMERALD BAY ENERGY INC.

6. (a) The directors may, between annual general meetings of the Corporation, appoint one or more additional directors of the Corporation to serve until the next annual general meeting of the Corporation, but the number of additional directors so appointed and serving as directors at any particular time shall not exceed one-third of the number of directors who held office at the expiration of the immediately preceding annual general meeting of the Corporation.
- (b) The Corporation has a lien on all shares registered in the name of a shareholder or his legal representative for a debt of that shareholder to the Corporation.



BY-LAW NO. 1

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

EMERALD BAY ENERGY INC.

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

SECTION ONE
INTERPRETATION

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

"Act" means the *Business Corporations Act* (Alberta), or any statute that may be substituted therefore, as from time to time amended;

"appoint" includes "elect" and vice versa;

"articles" means the articles attached to the Certificate of Incorporation of the Corporation as from time to time amended or restated;

"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;

"cheque" includes a draft;

"Corporation" means the corporation amalgamated under the Act by the said certificate to which the articles are attached and named "Emerald Bay Energy Inc.";

"meeting of shareholders" includes an annual meeting of shareholders and a special meeting of shareholders;

"recorded address" has the meaning set forth in section 11.08;

"Regulations" means the Regulations under the Act as published or from time to time amended and every regulation that may be substituted therefor and, in the case of such substitution, any references in the by-laws of the Corporation to provisions of the Regulations shall be read as references to the substituted provisions therefor in the new regulations; and

"special meeting of shareholders" includes a meeting of any class or classes of shareholders and a special meeting of all shareholders entitled to vote at an annual meeting of shareholders.

Except as defined above, words and expressions defined in the Act and the Regulations have the same meanings when used herein. Words importing the singular number include the plural and vice versa; words importing gender include the masculine, feminine and neuter genders; and words importing a person include an individual, partnership, association, body corporate, trustee, executor, administrator and legal representative.

SECTION TWO

BUSINESS OF THE CORPORATION

2.01 Registered Office. - The registered office of the Corporation shall be at the place within the Province of Alberta as is specified in the notice thereof filed with the articles and thereafter as the board may from time to time determine.

2.02 Corporate Seal. - The Corporation may have a corporate seal which shall be adopted and may be changed by resolution of the board.

2.03 Financial Year. - The board may by resolution fix the financial year of the Corporation and the directors may from time to time by resolution change the financial year of the Corporation.

2.04 Execution of Documents. -

- (a) Instruments in writing requiring execution by the Corporation may be signed on behalf of the Corporation by any officer or director of the Corporation and all instruments in writing so signed shall be binding upon the Corporation without any further authorization or formality. The board may from time to time by resolution appoint any officer or officers or any other person or persons on behalf of the Corporation either to sign instruments in writing generally or to sign specific instruments in writing.
- (b) The corporate seal of the Corporation may be affixed to instruments in writing signed as aforesaid by any such person authorized to sign the same or at the direction of any such person.
- (c) The term "instruments in writing" as used herein shall include deeds, contracts, mortgages, hypothecs, charges, conveyances, transfers and assignments of property, real or personal, immovable or moveable, agreements, releases, receipts and discharges for the payment of money or other obligations, cheques, promissory notes, drafts, acceptances, bills of exchange and orders for the payment of money, conveyances, transfers and assignments of shares, instruments of proxy, powers of attorney, stocks, bonds, debentures or other securities or any paper writings.
- (d) Subject to the provisions of Section 11.04, the signature or signatures of an officer or director, person or persons appointed as aforesaid by resolution of the board, may, if specifically authorized by resolution of the directors, be printed, engraved, lithographed or otherwise mechanically reproduced upon all instruments in writing executed or issued by or on behalf of the Corporation and all instruments in writing on which the signature or signatures of any of the foregoing officers, directors or persons shall be so reproduced, by authorization by resolution of the directors, shall be deemed to have been manually signed by such officers or persons whose signature or signatures is or are so reproduced and shall be as valid as if they had been signed manually and notwithstanding that the officers, directors or persons whose signature or signatures is or are so reproduced may have ceased to hold office at the date of delivery or issue of such instruments in writing.

2.05 Banking Arrangements. - The banking business of the Corporation including, without limitation, the borrowing of money and the giving of security therefore, 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.

2.06 Voting Rights in Other Bodies Corporate. - The signing officers of the Corporation under section 2.04 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 shall be in favour of such persons as may be determined by the officers executing or arranging for them. In addition, the board may from time to time direct the manner in which and the persons by whom any particular voting rights or class of voting rights may or shall be exercised.

2.07 Divisions. - The board may cause the business and operations of the Corporation or any part thereof to be divided into one or more divisions upon a basis, including without limitation types of business or operations, geographical territories, product lines or goods or services, as may be considered appropriate in each case. In connection with any such division the board or, subject to any direction by the board, the chief executive officer, may authorize from time to time, upon such basis as may be considered appropriate in each case:

- (a) Subdivision and Consolidation - the further division of the business and operations of any division into sub-units and the consolidation of the business and operations of any divisions and sub-units;
- (b) Name - the designation of any division or sub-unit by, and the carrying on of the business and operations of any division or sub-unit under, a name other than the name of the Corporation; provided that the Corporation shall set out its name in legible characters in all places required by law; and
- (c) Officers - the appointment of officers for any division or sub-unit, the determination of their powers and duties, and the removal of any officers so appointed, provided that any such officers shall not by reason of their being officers of a division or sub-unit, be officers of the Corporation.

SECTION THREE

BORROWING AND SECURITY

3.01 Borrowing Power. - Without limiting the borrowing powers of the Corporation as set forth in the Act, but subject to the articles and any unanimous shareholder agreement, the board may from time to time on behalf of the Corporation, without authorization of the shareholders:

- (a) borrow money upon the credit of the Corporation;
- (b) issue, reissue, sell or pledge bonds, debentures, notes or other evidences of indebtedness or guarantee of the Corporation, whether secured or unsecured;
- (c) to the extent permitted by the Act, give a guarantee on behalf of the Corporation to secure performance of any present or future indebtedness, liability or obligation of any person; and
- (d) mortgage, hypothecate, pledge or otherwise create a security interest in all or any currently owned or subsequently acquired real or personal, movable or immovable, property of the

Corporation including book debts, rights, powers, franchises and undertakings, to secure any such bonds, debentures, notes or other evidences of indebtedness or guarantee or any other present or future indebtedness, liability or 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 a committee of the board, a director or an officer of the Corporation or any other person 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 may determine at the time of such delegation.

SECTION FOUR

DIRECTORS

4.01 Number of Directors. - Until changed in accordance with the Act, the board shall consist of not fewer than the minimum number and not more than the maximum number of directors provided in the articles.

4.02 Qualification. - No person shall be qualified for election as a director if he is less than 18 years of age; if he is a dependent adult as defined in the *Dependent Adults Act* (Alberta) or is the subject of a certificate of incapacity under that Act, is a formal patient as defined in the *Mental Health Act* (Alberta), is the subject of an order under The *Mentally Incapacitated Persons Act* (Alberta) appointing a committee of his person or estate or both, or has been found to be a person of unsound mind by a court in Alberta or elsewhere; if he is not an individual; or if he has the status of a bankrupt. A director need not be a shareholder.

4.03 Election and Term. - The election of directors shall take place 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 shareholders otherwise determine. Where the shareholders adopt an amendment to the articles to increase the number or minimum number of directors, the shareholders may, at the meeting at which they adopt the amendment, elect the additional number of directors authorized by the amendment. The election shall be by 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 Act, the shareholders may by resolution passed at a meeting of shareholders specially called for such purpose 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 board.

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, a quorum of the board may appoint a qualified individual to fill a vacancy in the board.

4.07 Action by the Board. - The board shall manage the business and affairs of the Corporation. The powers of the board may be exercised at a meeting 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 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.

4.08 Meeting by Telephone. - A director may participate in a meeting of the board or of a committee of the board by means of conference telephone or other communications 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.

4.09 Place of Meetings. - Meetings of the board may be held at any place in or outside Alberta.

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

4.11 Notice of Meeting. - Notice of the time and place of each meeting of the board shall be given in the manner provided in Section Eleven 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, if required by the Act, any proposal to:

- (a) submit to the shareholders any question or matter requiring approval of the shareholders;
- (b) fill a vacancy among the directors or in the office of auditor;
- (c) issue securities, except in the manner and on the terms authorized by the directors;
- (d) declare dividends;
- (e) purchase, redeem or otherwise acquire shares issued by the Corporation, except in the manner and on the terms authorized by the directors;
- (f) pay a commission for the sale of shares;
- (g) approve a management proxy circular;
- (h) approve any annual financial statements; or
- (i) adopt, amend or repeal by-laws.

4.12 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.

4.13 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.

4.14 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.

4.15 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 or president. If no such officer is present, the directors present shall choose one of their number to be chairman.

4.16 Quorum. - The quorum for the transaction of business at any meeting of the board shall be a majority of directors or such greater number of directors as the board may from time to time determine.

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. 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 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 proposed material contract 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 proposed contract shall be referred to the board or shareholders for approval even if such contract is one that in the ordinary course of the Corporation's business would not require approval by the board or shareholders. Such a director shall not vote on any resolution to approve any such contract or proposed contract except as permitted by the Act.

4.19 Remuneration and Expenses. - Subject to 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.

SECTION FIVE

COMMITTEES

5.01 Committees of the Board. - The board may appoint one or more committees of the board, however designated, and delegate to any such committee any of the powers of the board except those which pertain to items which, under the Act, a committee of the board has no authority to exercise.

5.02 Transaction of Business. - The powers of a committee of the board may be exercised by a meeting at which a quorum is present or by resolution in writing signed by all 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 Bodies. - The board may from time to time appoint such advisory bodies as it may deem advisable.

5.04 Procedure. - Unless otherwise determined by the board, each committee and advisory body shall have power to fix its quorum at not less than a majority of its members, to elect its chairman and to regulate its procedure.

SECTION SIX

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. One person may hold more than one office. The board may specify the duties of and, in accordance with this by-law and subject to the Act, 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.

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 have such other powers and duties as the board may specify.

6.03 Managing Director. - The board may from time to time also appoint a managing director who shall be a resident Canadian and a director. If appointed, he shall be the chief executive officer and, subject to the authority of the board, shall have general supervision of the business and affairs 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.

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

6.05 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, records 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 otherwise may be specified.

6.06 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 otherwise may be specified.

6.07 Powers and Duties of Officers. - The powers and duties of all officers shall be such as the terms of their engagement call for or as the board or (except for those whose powers and duties are to be specified only by the board) the chief executive officer may specify. The board and (except as aforesaid) the chief executive officer 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. 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.

6.08 Term of Office. - The board, in its discretion, may remove any officer of the Corporation. Otherwise each officer appointed by the board shall hold office until his successor is appointed or until his earlier resignation.

6.09 Agents and Attorneys. - The Corporation, by or under the authority of the board, shall have power from time to time to appoint agents or attorneys for the Corporation in or outside Canada with such powers (including the power to subdelegate) of management, administration or otherwise as may be thought fit.

6.10 Conflict of Interest. - An officer shall disclose his interest in any material contract or proposed material contract with the Corporation in accordance with section 4.19.

SECTION SEVEN

PROTECTION OF DIRECTORS, OFFICERS AND OTHERS

7.01 Limitation of Liability. - 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 exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. Subject to the foregoing, no director or officer shall be liable for the acts, receipts, neglects or defaults of any other director, 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 which shall happen in the execution of the duties of his office or in relation thereto; 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 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, 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. The Corporation may also indemnify such person in such other circumstances as the Act or law permits.

Nothing in this by-law shall limit the right of any person entitled to indemnity to claim indemnity apart from the provisions of this by-law.

SECTION EIGHT

SHARES

8.01 Allotment of Shares. - Subject to the Act and the articles 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 provided 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 Transfers. - Subject to the Act, no transfer of a share shall be registered in a securities register except upon presentation of the certificate representing such share with an endorsement which complies with the Act made thereon or delivered therewith duly executed by an appropriate person as provided by the Act, together with such reasonable assurance that the endorsement is genuine and effective as the board may from time to time prescribe, upon payment of all applicable taxes and any reasonable 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 8.09.

8.04 Non-recognition of Trusts. - Subject to the Act, the Corporation may treat the registered holder of any share as the person exclusively entitled to vote, to receive notices, to receive any dividend or other payment in respect of the share, and otherwise to exercise all the rights and powers of an owner of the share.

8.05 Share Certificates. - 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 certificate of 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.

Such certificates shall be in such form as the board may from time to time approve. Any such certificate shall be signed in accordance with section 2.04 and need not be under the corporate seal.

8.06 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 or other such certificate in lieu of and upon cancellation of a certificate that has been mutilated or in substitution for a certificate claimed to have been lost, destroyed or wrongfully taken on payment of such reasonable 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.

8.07 Joint Shareholders. - If two 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.

8.08 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 any dividend or other payments in respect thereof 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.

8.09 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 the articles, 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, the Corporation may refuse to register a transfer of the whole or any part of such shares.

SECTION NINE

DIVIDENDS AND RIGHTS

9.01 Dividends. - Subject to the Act, and the Articles of Incorporation, 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. 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.

9.02 Dividend Cheques. - A dividend payable in money shall be paid by cheque 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. 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.

9.03 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 the 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 notice of any such record date shall be given not less than 7 days before such record date in the manner provided by the Act. If no record date is so fixed, 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.

SECTION TEN

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 situate or, if the board shall so determine, at some other place in Alberta or, if the Directors so determine, in any city in the Province of Ontario.

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 Eleven 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 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 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.

10.05 Maintenance of Register. - The Directors may from time to time appoint an agent to maintain a securities register. The Directors may at any time terminate any such appointment.

10.06 Record Date for Notice. - If no record date is fixed in the notice calling a meeting of shareholders, the record date for the determination of the shareholders entitled to receive notice of the meeting shall be at the close of business on the day immediately preceding the day on which the notice is given or, if no notice is given, shall be 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 duly represented or if those not present or represented 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, so long as such shareholders, auditors or directors present are not attending for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called. 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 Alberta, shareholders not present or duly represented, 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: chairman of the board, managing director, president, or a vice-president who is a shareholder.

If no such officer is present within 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.

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 auditor 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. - Subject to the Act in respect of a sole shareholder, a quorum for the transaction of business at any meeting of shareholders shall be two persons present in person, each being a shareholder entitled to vote thereat or a duly appointed proxyholder or representative for a shareholder so entitled holding or representing not less than 10% of the issued and voting capital of the Corporation. If a quorum is present at the opening of any meeting of shareholders, the shareholders present or represented may proceed with the business of the meeting notwithstanding that a quorum is not present throughout the meeting. If a quorum is not present at the opening of any meeting of shareholders, the shareholders present or represented may adjourn the meeting to a fixed time (which time shall be not less than seven days nor more than 30 days from the time of the adjourned meeting) and the same place as the adjourned meeting but may not transact any other business. The quorum at an adjourned meeting of the shareholders which has been adjourned in accordance with the section shall be the number of shareholders present personally or by proxy at such adjourned meeting.

10.11 Right to Vote. - Every person named in the list referred to in section 10.05 shall be entitled to vote the shares shown thereon opposite his name at the meeting to which such list relates, except to the extent that (a) where the Corporation has fixed a record date in respect of such meeting, such person has transferred any of his shares after such record date or, where the Corporation has not fixed a record date in respect of such meeting, such person has transferred any of his shares after the date on which such list is prepared, and (b) the transferee, having produced properly endorsed certificates evidencing such shares or having otherwise established that he owns such shares, has demanded not later than 2 days before the meeting or any shorter period that the chairman of the meeting may permit that his name be included in such list. In any such excepted case the transferee shall be entitled to vote the transferred shares at such meeting.

10.12 Proxyholders and Representatives. - Every shareholder entitled to vote at a meeting of shareholders may appoint a proxyholder and one or more alternate proxyholders, to attend and act as his representative 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. Alternatively, every such shareholder which is a body corporate or association may authorize by resolution of its directors or governing body an individual to represent it at a meeting of shareholders and such individual may exercise on the shareholder's behalf all the powers it could exercise if it were an individual shareholder. The authority of such an individual shall be established by depositing with the Corporation a certified copy of such resolution, or in such other manner as may be satisfactory to the secretary of the Corporation or the chairman of the meeting. Any such proxyholder or representative need not be a shareholder.

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, excluding Saturdays and holidays, 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 having been specified in such notice, 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, any one of them present in person or duly represented 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 and vote, they shall vote as one the shares jointly held by them.

10.15 Votes to Govern. - At any meeting of shareholders every question shall, unless otherwise required by the articles or by-laws or by law, be determined by a 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 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, and 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 has been taken thereon, the chairman may require a ballot or any person who is present and entitled to vote on such question at the meeting may 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. - The chairman at a meeting of shareholders may, with the consent of the meeting and subject to such conditions as the meeting may decide, adjourn the meeting from time to time and from place to place. 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 time of adjournment. Subject to the Act, 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 Action in Writing by Shareholders. - A resolution in writing signed 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 duly represented constitutes a meeting.

10.21 Meeting by Telephone. - A shareholder or any other person entitled to attend a meeting of shareholders may participate in the meeting by means of a telephone or other communications facility that

permits all persons participating in the meeting to hear each other, and a person participating in such a meeting by those means is deemed to be present at the meeting.

SECTION ELEVEN

NOTICES

11.01 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. 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.

11.02 Notice to Joint Shareholders. - If two or more persons are registered as joint holders of any share, any notice may be addressed to all such joint holders, but notice addressed 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 specified number of days' notice of any meeting or other event, the day of giving the notice shall be excluded and the day of the meeting or other event shall be included, unless the computation of time is required by law to be performed differently.

11.04 Undelivered Notices. - If any notice given to a shareholder pursuant to section 11.01 is returned on three 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, proxyholder or other person entitled to attend a meeting of shareholders, 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 the Act, the regulations thereunder, the articles, the by-laws or otherwise, and such waiver or abridgement, whether given before or after the meeting or other event of which notice is required to be given, 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 or a committee of the board which may be given in any manner.

11.08 Interpretation. - In this by-law, "recorded address" means in the case of a shareholder his address as recorded in the securities register; 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.

SECTION TWELVE

EFFECTIVE DATE

12.01 Effective Date. - This by-law shall come into force when made by the board in accordance with the Act.

MADE by the board effective the 15th day of May, 1997.



President



Secretary

CONFIRMED by the shareholders in accordance with the Act the 15th day of May, 1997.



Secretary