

BY-LAW NUMBER 1

A BY-LAW RELATING TO THE BUSINESS AND AFFAIRS OF ELECTROFUEL INC.

ARTICLE 1

INTERPRETATION

1.01 Definitions

In this by-law:

"Act" means the *Business Corporations Act* (Ontario) and the regulations enacted pursuant to it and any statute and regulations that may be substituted for them, as amended from time to time;

"articles" means the articles, as that term is defined in the Act, of the Corporation;

"auditor" means the auditor of the Corporation;

"board" means the board of directors of the Corporation;

"by-law" means a by-law of the Corporation;

"Corporation" means the corporation incorporated on September 24, 1996 under the name "ELECTROFUEL INC.";

"director" means a director of the Corporation;

"officer" means an officer of the Corporation, and reference to any specific officer is to the individual holding that office of the Corporation;

"person" means an individual, body corporate, partnership, joint venture, trust, unincorporated organization, association, the Crown or any agency or instrumentality thereof, or any entity recognized by law;

"proxyholder" means an individual holding a valid proxy for a shareholder;

"resident Canadian" has the meaning ascribed to that phrase in the Act;

"shareholder" means a shareholder of the Corporation; and

"voting person" means, in respect of a meeting of shareholders, an individual who is either a shareholder entitled to vote at that meeting, a duly authorized representative of a shareholder entitled to vote at the meeting or a proxyholder entitled to vote at that meeting.

1.02 Number, Gender and Headings

In this by-law, words in the singular include the plural and vice-versa and words in one gender include all genders. The insertion of headings in this by-law and its division into articles, sections and other subdivisions are for convenience of reference only, and shall not affect the interpretation of this by-law.

1.03 By-Law Subordinate to Other Documents

This by-law is subordinate to, and should be read in conjunction with, the Act, the articles and any unanimous shareholder agreement of the Corporation.

1.04 Computation of Time

The computation of time and any period of days shall be determined in accordance with the Act.

ARTICLE 2

DIRECTORS

2.01 Notice of Meeting

Any director or the president may call a meeting of the board by giving notice stating the time and place of the meeting to each of the directors other than the director giving that notice. Notices sent by delivery or electronic means shall be sent no less than 48 hours before the time of the meeting. Notices sent by mail shall be sent no less than 5 days before the day of the meeting.

The board may appoint, by resolution, dates, time and places for meetings of the board. A copy of any such resolution shall be sent to each director forthwith after being passed, but no other notice is required for any such meeting.

2.02 Meetings Without Notice

A meeting of the board may be held without notice immediately following the first or any annual meeting of shareholders.

2.03 Place of Meeting

A meeting of the board may be held at any place within or outside Ontario, and no such meeting need be held at a place within Canada.

2.04 No Notice to Newly Appointed Director

An individual need not be given notice of the meeting at which that individual is appointed by the other directors to fill a vacancy on the board, if that individual is present at that meeting.

2.05 Quorum for Board Meetings

If there are 1 or 2 directors, all of the directors constitute a quorum at a meeting of the board. If there are 3, 4 or 5 directors, a majority of the directors constitute a quorum at a meeting of the board. Otherwise, such a quorum consists of the next whole number not less than $\frac{2}{5}$ ths of the number of directors. In this section, the "number of directors" is either:

- (a) the number of directors specified in the articles; or
- (b) if a minimum and maximum number of directors is provided for in the articles, the number determined from time to time by special resolution or, if the special resolution empowers the directors to determine the number, by resolution of the directors, or if no such resolution has been passed, the number of directors named in the articles.

2.06 Chairman of Board Meetings

The chairman of a meeting of the board must be a director present at the meeting who consents to preside as chairman. The first-mentioned of the chairman of the board, the managing director or the president who so qualifies shall preside as chairman of the meeting. If none

of them is so qualified, the directors present at the meeting shall choose a director to preside as chairman of the meeting.

2.07 Votes at Board Meetings

Each director present at a meeting of the board shall have 1 vote on each motion arising. Motions arising at meetings of the board shall be decided by a majority vote. The chairman of the meeting shall not have a second or casting vote.

2.08 Officers

Each officer shall hold office during the pleasure of the board. Any officer may, however, resign at any time by giving notice to the Corporation.

ARTICLE 3

MEETINGS OF SHAREHOLDERS

3.01 Notice of Shareholders' Meetings

The board may call a meeting of shareholders by causing notice of the time and place of the meeting to be sent to each shareholder entitled to vote at the meeting, each director and the auditor. Such notice shall be sent no less than 21 days and no more than 50 days before the meeting, if the Corporation is an offering corporation (as defined in the Act), or no less than 10 days and no more than 50 days before the meeting if the Corporation is not an offering corporation.

3.02 Quorum at Meetings of Shareholders

If the Corporation has only 1 shareholder entitled to vote at a meeting of shareholders, that shareholder constitutes a quorum. Otherwise, any 2 voting persons present shall constitute a quorum, but only to appoint a chairman and adjourn the meeting. For all other purposes, a quorum consists of at least 2 voting persons present and authorized to cast in the aggregate not less than 25% of the total number of votes attaching to all shares carrying the right to vote at that meeting.

3.03 Chairman's Vote

The chairman of any meeting of shareholders shall not have a second or casting vote.

3.04 Voting

Unless the chairman of a meeting of shareholders, directs a ballot, or a voting person demands one, each motion shall be voted upon by a show of hands. Each voting person has 1 vote in a vote by show of hands. A ballot may be directed or demanded either before or after a vote by show of hands. If a ballot is taken, a prior vote by show of hands has no effect.

3.05 Scrutineers

The chairman of a meeting of shareholders may appoint for that meeting 1 or more scrutineers, who need not be voting persons.

3.06 Who May Attend Shareholders' Meeting

The only persons entitled to attend a meeting of shareholders are voting persons, the directors, the auditor and, if any, the chairman, the managing director and the President, as well as others permitted by the chairman of the meeting.

ARTICLE 4

SECURITY CERTIFICATES, PAYMENTS

4.01 Certificates

Security certificates shall be in such form as the board may approve or the Corporation adopt. The president or the board may order the cancellation of any security certificate that has become defaced and the issuance of a replacement certificate for it when the defaced certificate is delivered to the Corporation or to a transfer agent or branch transfer agent of the Corporation.

4.02 Cheques

Any amount payable in cash to shareholders (including dividends payable in cash) may be paid by cheque drawn on any of the Corporation's bankers to the order of each registered holder of shares of the class or series in respect of which such amount is to be paid. Cheques may be sent by delivery or first class mail to such registered holder at that holder's address appearing on the register of shareholders, unless that holder otherwise directs in writing. By sending a cheque, as provided in this by-law, in the amount of the dividend less any tax that the Corporation is required to

withhold, the Corporation discharges its liability to pay the amount of that dividend, unless the cheque is not paid on due presentation.

4.03 Cheques to Joint Shareholders

Cheques payable to joint shareholders shall be made payable to the order of all such joint shareholders unless such joint shareholders direct otherwise. Such cheques may be sent to the joint shareholders at the address appearing on the register of shareholders in respect of that joint holding, to the first address so appearing if there is more than one, or to such other address as those joint shareholders direct in writing.

4.04 Non-Receipt of Cheques

The Corporation shall issue a replacement cheque in the same amount to any person who does not receive a cheque sent as provided in this by-law, if that person has satisfied the conditions regarding indemnity, evidence of non-receipt and title set by the board from time to time, either generally or for that particular case.

4.05 Currency of Dividends

Dividends or other distributions payable in cash may be paid to some shareholders in Canadian currency and to other shareholders in equivalent amounts of a currency or currencies other than Canadian currency. The board may declare dividends or other distributions in any currency or in alternative currencies and make such provisions as it deems advisable for the payment of such dividends or other distributions.

ARTICLE 5

SIGNATORIES, INFORMATION

5.01 Signatories

The following are the only persons authorized to sign any document on behalf of the Corporation, other than in the usual and ordinary course of the Corporation's business:

- (a) any individual appointed by resolution of the board to sign a specific document, that type of document or generally on behalf of the Corporation; or
- (b) any director or any officer appointed to office by the board.

Any document so signed may, but need not, have the corporate seal applied, if there is one.

5.02 Facsimile Signatures

The signature of any individual authorized to sign on behalf of the Corporation may, if specifically authorized by resolution of the board, be written, printed, stamped, engraved, lithographed or otherwise mechanically reproduced. Anything so signed shall be as valid as if it had been signed manually, even if that individual has ceased to hold office when anything so signed is issued or delivered, until revoked by resolution of the board.

5.03 Restriction on Information Disclosed

Except as required by the Act or authorized by the board, no shareholder is entitled by virtue of being a shareholder to disclosure of any information, document or records respecting the Corporation or its business.

ARTICLE 6

PROTECTION AND INDEMNITY

6.01 Transactions with the Corporation

No director or officer shall be disqualified, by virtue of being a director, or by holding any other office of, or place of profit under, the Corporation or any body corporate in which the Corporation is a shareholder or is otherwise interested, from entering into, or from being concerned or interested in any manner in, any contract, transaction or arrangement made, or proposed to be made, with the Corporation or any body corporate in which the Corporation is interested and no such contract, transaction or arrangement shall be void or voidable for any such reason. No director or officer shall be liable to account to the Corporation for any profit arising from any such office or place of profit or realized in respect of any such contract, transaction or arrangement. Except as required by the Act, no director or officer must make any declaration or disclosure of interest or, in the case of a director, refrain from voting in respect of any such contract, transaction or arrangement.

6.02 Limitation of Liability

Subject to the Act, no director or officer shall be liable for:

- (a) the acts, receipts, neglects or defaults of any other person;
- (b) joining in any receipt or act for conformity;
- (c) any loss, damage or expense to the Corporation arising from the insufficiency or deficiency of title to any property acquired by or on behalf of the Corporation;
- (d) the insufficiency or deficiency of any security in or upon which any moneys of the Corporation are invested;
- (e) any loss, damage or expense arising from the bankruptcy, insolvency, act or omission of any person with whom any moneys, securities or other property of the Corporation are lodged or deposited;
- (f) any loss, damage or expense occasioned by any error of judgment or oversight; or
- (g) any other loss, damage or expense related to the performance or non-performance of the duties of that individual's office.

6.03 Contracts on Behalf of the Corporation

Subject to the Act, any contract entered into, or action taken or omitted, by or on behalf of the Corporation shall, if duly approved by a resolution of the shareholders, be deemed for all purposes to have had the prior authorization of the shareholders.

6.04 Indemnity of Directors and Officers

As required or permitted by the Act, the Corporation shall indemnify each Indemnified Person (as defined in this section) against all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment, which that Indemnified Person reasonably incurs in respect of any civil, criminal or administrative action or proceeding to which that Indemnified Person is made a party by reason of being or having been a director or officer of the Corporation or of a body corporate of which the Corporation is or was a shareholder or creditor if:

- (a) the Indemnified Person 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, the Indemnified Person had reasonable grounds for believing that the conduct was lawful.

"Indemnified Person" means

- (a) each director and former director of the Corporation;
- (b) each officer and former officer of the Corporation;
- (c) each individual 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
- (d) the respective heirs and legal representatives of each of the persons designated in the preceding paragraphs (a) through (c).

6.05 Indemnities Not Limiting

The provisions of this Article 6 shall be in addition to and not in substitution for any rights, immunities and protections to which an Indemnified Person is otherwise entitled.

ARTICLE 7

NOTICES

7.01 Procedure for Sending Notices

Notice shall be deemed to have been sufficiently sent if sent in writing to the address of the addressee on the books of the Corporation and delivered in person, sent by prepaid first class mail or sent by any electronic means of sending messages, including telex or facsimile transmission, which produces a paper record. Notice shall not be sent by mail if there is any general interruption of postal services in the municipality in which or to which it is mailed. Each notice so sent shall be deemed to have been received on the day it was delivered or sent by electronic means or on the fifth day after it was mailed.

7.02 Notices to Successors in Title

Notice to a shareholder is sufficient notice to each successor in title to that shareholder until the name and address of that successor have been entered on the Corporation's share register.

7.03 Notice to Joint Shareholders

Notice to one joint shareholder is sufficient notice to all of them. Such notice shall be addressed to all such joint shareholders and sent to the address for them on the Corporation's register of shareholders, or to the first such address if there is more than one.

7.04 Facsimile Signatures on Notices

The signature on any notice or other communication or document to be sent by the Corporation may be written, printed, stamped, engraved, lithographed or otherwise mechanically reproduced.

7.05 Omission of Notice Does Not Invalidate Actions

All actions taken at a meeting in respect of which a notice has been sent shall be valid even if:

- (a) by accident, notice was not sent to any person;
- (b) notice was not received by any person; or
- (c) there was an error in a notice that did not affect the substance of that notice.

7.06 Waiver of Notice

Any person entitled to notice under the Act, the articles or the by-laws may waive that notice. Waiver, either before or after the event referred to in the notice, shall cure any default in sending that notice.

ARTICLE 8

REPEAL OF FORMER BY-LAWS


8.01 Former By-Laws May be Repealed

The board may repeal one or more by-laws by passing a by-law that contains provisions to that effect.

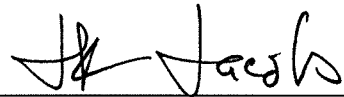
8.02 Effect of Repeal of By-Laws

The repeal of any by-law in whole or part shall not in any way affect the validity of any act done or right, privilege, obligation or liability acquired or incurred thereunder prior to such repeal. All directors, officers and other persons acting under any by-law repealed in whole or part shall continue to act as if elected or appointed under the provisions of this by-law.

MADE by the board on *September 24*, 1996



President



Secretary