For Ministry Use Only	
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Ministry of
Government Services
Ontario
CERTIFICATE
This is to certify that these
articles are effective on

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Ministère des Services gouvernementaux

CERTIFICAT Ceci certifie que les présents statuts entrent en vigueur le

JANUARY 3 1 JANVIER, 2017

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Director / Directeur Business Corporations Act / Loi sur les sociétés par actions

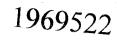
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Form 4 Business Corporations Act

-Formule-4-Loi sur les sociétés par actions

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	Adresse du siège social : 65 Queen Street West, Suite 520 Street & Number or R.R. Number & if Multi-Office Building give Room No. / Rue et numéro du numéro de la R.R. et, s'il s'agit d'un édifice à bureaux, numéro du bureau Terrente Optanio																													
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		Toronto, Ontario M 5 H 2 I Name of Municipality or Post Office / Postal Code/Code Postal Code/Code																												
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3.		Number of directors is: Fixed number OR minimum and maximum Nombre d'administrateurs : Nombre fixe OU minimum et maximum												1	10															
1.	Th	ne dir	ecto	or(s)	is/a	re: /	Adn	ninis	trate	eur(s	s) :																			
First name, middle names and surname Prénom, autres prénoms et nom de famille							ille	Address for service, giving Street & No. or R.R. No., Municipality, Province, Country and Postal Code													Resident Canadian State 'Yes' or 'No'									
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George Langdon Calle 54, #476-A, entre 55y 57, Centro, No Merida, Yucatan, Mexico, CP97000																														

Ontario Corporation Number Numéro de la société en Ontario



First name, middle names and surname	Address for service, giving Street & No. or R.R. No., Municipality, Province, Country and Postal Code	Resident Canadian State 'Yes' or 'No'
Mike Minder	336 52 nd Street, Delta, BC V4M 2Y4	Yes
Ash Kaushal	5272 Glen Erin Drive, Mississauga, ON L5M 5C2	Yes

A - Amalgamation Agreement / Con	vention de fusion:			
corporations as required by subse	is been duly adopted by the shareholders ction 176 (4) of the <i>Business Corporations A</i> té qui fusionnne ont dûment adopté la conve r les sociétés par actions à la date mentionn	i <i>ct</i> on the date set out below. Antion de fusion conformémen		
subsidiaries / Fusion d'une soci The amalgamation has been appr required by section 177 of the Bus Les administrateurs de chaque so conformément à l'article 177 de la	rporation and one or more of its subs iété mère avec une ou plusieurs de ses fi oved by the directors of each amalgamating siness <i>Corporations Act</i> on the date set out b ciété qui fusionne ont approuvé la fusion par a <i>Loi sur les sociétés par actions</i> à la date m	liales ou fusion de filiales : corporation by a resolution as pelow. r voie de résolution entionnée ci-dessous.		
The articles of amalgamation in su Les statuts de fusion reprennent e ChroMedX Corp.	ubstance contain the provisions of the article essentiellement les dispositions des statuts o	s of incorporation of onstitutifs de		
and are more particularly set out in et sont énoncés textuellement aux	n these articles. présents statuts.			
Names of amalgamating corporations Dénomination sociale des sociétés qui fusionner	Ontario Corporation Number nt Numéro de la société en Ontario	Date of Adoption/Approval Date d'adoption ou d'appro Year Month Day année mois jour		
ChroMedX Corp.	001920796	2016/11/30		
ChroMedX Ltd.	002398424	2016/11/30		
		1		

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 Restrictions, if any, on business the corporation may carry on or on powers the corporation may exercise. Limites, s'il y a lieu, imposées aux activités commerciales ou aux pouvoirs de la société.

There are no restrictions.

7. The classes and any maximum number of shares that the corporation is authorized to issue: Catégories et nombre maximal, s'il y a lieu, d'actions que la société est autorisée à émettre :

The Company is authorized to issue:

1. an unlimited number of common shares; and

2. an unlimited number of special shares, issuable in series.

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 Rights, privileges, restrictions and conditions (if any) attaching to each class of shares and directors authority with respect to any class of shares which may be issued in series;

Droits, privilèges, restrictions et conditions, s'il y a lleu, rattachés à chaque catégorie d'actions et pouvoirs des administrateurs relatifs à chaque catégorie d'actions qui peut être émise en série :

Common Shares

(1) Each holder of common shares shall be entitled to receive notice of and to attend all meetings of shareholders of the Company, except meetings at which only holders of other classes or series of shares are entitled to attend, and at all such meetings shall be entitled to one vote in respect of each common share held by such holder.

(2) The holders of common shares shall be entitled to receive dividends if and when declared by the board of directors.

(3) In the event of any liquidation, dissolution or winding-up of the Company or other distribution of the assets of the Company among its shareholders for the purpose of winding-up its affairs, the holders of common shares shall be entitled, subject to the rights of holders of shares of any class ranking prior to the common shares, to receive the remaining property or assets of the Company.

Special Shares

(1) The special shares may from time to time be issued in one or more series and subject to the following provisions, and subject to the sending of articles of amendment in prescribed form, and the endorsement thereon of a certificate of amendment in respect thereof, the directors may fix from time to time before such issue the number of shares that is to comprise each series and the designation, rights, privileges, restrictions and conditions attaching to each series of special shares including, without limiting the generality of the foregoing, the rate or amount of dividends or the method of calculating dividends, the dates of payment thereof, the redemption, purchase and/or conversion prices and terms and conditions of redemption, purchase and/or conversion, and any sinking fund or other provisions.

(2) The special shares of each series shall, with respect to the payment of dividends and the distribution of assets or return of capital in the event of liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, or any other return of capital or distribution of the assets of the Company among its shareholders for the purpose of winding up its affairs, rank on a parity with the special shares of every other series and be entitled to preference over the common shares and over any other shares of the Company ranking junior to the special shares. The special shares of any series may also be given such other preferences, not inconsistent with these articles, over the special shares and any other shares of the Company ranking junior to the special shares to the special shares as may be fixed as provided herein.

(3) If any cumulative dividends or amounts payable on the return of capital in respect of a series of special shares are not paid in full, all series of special shares shall participate rateably in respect of such dividends and return of capital.

(4) The special shares of any series may be made convertible into special shares of any other series or common shares at such rate and upon such basis as the directors in their discretion may determine.

(5) Unless the directors otherwise determine in the articles of amendment designating a series, the holder of each share of a series of special shares shall be entitled to one vote at a meeting of shareholders.

Voting Restrictions

The holders of shares of a class or of a series of the Company are not entitled to vote separately as a class or series, as the case may be, upon, and shall not be entitled to dissent in respect of, any proposal to amend the articles to:

(1) increase or decrease any maximum number of authorized shares of such class or series, or increase any maximum number of authorized shares of a class or series having rights or privileges equal or superior to the shares of such class or series;

(2) effect an exchange, reclassification or cancellation of the shares of such class or series; or

(3) create a new class or series of shares equal or superior to the shares of such class or series.

 The Issue, transfer or ownership of shares is/is not restricted and the restrictions (if any) are as follows: L'émission, le transfert ou la propriété d'actions est/n'est pas restrictions. s'il y a lieu, sont les suivantes :

If the Company:

(a) is not a reporting issuer or investment fund within the meaning of applicable securities legislation; and

(b) has not distributed to the public (excluding accredited investors within the meaning of applicable securities legislation) any of its securities,

then no shares in the capital of the Company shall be transferred without either:

(i) the previous consent of the board of directors expressed by a resolution passed by the board of directors or by an instrument or instruments in writing signed by a majority of the directors; or

(ii) the previous consent of the holders of at least 51% of the shares of that class for the time being outstanding expressed by a resolution passed by the shareholders or by an instrument or instruments in writing signed by such shareholders.

10. Other provisions, (if any): Autres dispositions, s'il y a lieu :

None.

 The statements required by subsection 178(2) of the Business Corporations Act are attached as Schedule "A". Les déclarations exigées aux termes du paragraphe 178(2) de la Loi sur les sociétés par actions constituent l'annexe A.

12. A copy of the amalgamation agreement or directors' resolutions (as the case may be) is/are attached as Schedule "B". Une copie de la convention de fusion ou les résolutions des administrateurs (selon le cas) constitue(nt) l'annexe B.

Page 5 of/de 6

These articles are signed in duplicate. Les présents statuts sont signés en double exemplaire.

CHROMEDX CORP.		
Names of Corporations / Dénomination By / <i>Par</i>	n sociale des sociétés	
0	James Samsoondar	Director
Signature / Signature	Print name of signatory / Nom du signataire en lettres moulées	Description of Office / Fonction
CHROMEDX LTD.		
Names of Corporations / Dénominatio	n sociale des sociétés	
By / Par	James Samsoondar	Director
Signature / Signature	Print name of signatory / Nom du signataire en lettres moulées	Description of Office / Fonction
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Signature / Signature	Print name of signatory / Nom du signataire en lettres moulées	Description of Office / Fonction
Names of Corporations / Dénomination	n sociale des sociélés	

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Schedule A-1

Statement of Director or Officer Pursuant to Subsection 178 (2) of the *Business Corporations Act* (Ontario)

I, James Samsoondar, of the City of Markham, in the Province of Ontario, hereby state as follows:

1. This Statement is made pursuant to subsection 178(2) of the *Business Corporations Act* (Ontario) (the "Act").

2. I am a director of ChroMedX Corp. (the "Corporation") and as such have knowledge of its affairs.

3. I have conducted such examinations of the books and records of the Corporation as are necessary to enable me to make the statements set forth below.

- 4. There are reasonable grounds for believing that:
 - (a) the Corporation is and the corporation to be formed by the amalgamation (the "Amalgamation") of the Corporation and ChroMedX Ltd. will be able to pay its liabilities as they become due; and
 - (b) the realizable value of such amalgamated corporation's assets will not be less than the aggregate of its liabilities and stated capital of all classes.

5. There are reasonable grounds for believing that no creditor of the Corporation will be prejudiced by the Amalgamation.

6. The Corporation has not been notified by any creditor that it objects to the Amalgamation and, accordingly, subsection 178(2)(c) of the Act has no application.

7. Since the Corporation has not received any notice pursuant to subsection 178(2)(c) of the Act, subsection 178(2)(d) of the Act has no application in the present circumstances.

This Statement is made this 35^{th} day of November, 2016.

James Samsoondar Director

Schedule A-2

Statement of Director or Officer Pursuant to Subsection 178 (2) of the *Business Corporations Act* (Ontario)

I, James Samsoondar, of the City of Markham, in the Province of Ontario, hereby state as follows:

1. This Statement is made pursuant to subsection 178(2) of the *Business Corporations Act* (Ontario) (the "Act").

2. I am a director of ChroMedX Ltd. (the "Corporation") and as such have knowledge of its affairs.

3. I have conducted such examinations of the books and records of the Corporation as are necessary to enable me to make the statements set forth below.

- 4. There are reasonable grounds for believing that:
 - (a) the Corporation is and the corporation to be formed by the amalgamation (the "Amalgamation") of the Corporation and ChroMedX Corp. will be able to pay its liabilities as they become due; and
 - (b) the realizable value of such amalgamated corporation's assets will not be less than the aggregate of its liabilities and stated capital of all classes.

5. There are reasonable grounds for believing that no creditor of the Corporation will be prejudiced by the Amalgamation.

6. The Corporation has not been notified by any creditor that it objects to the Amalgamation and, accordingly, subsection 178(2)(c) of the Act has no application.

7. Since the Corporation has not received any notice pursuant to subsection 178(2)(c) of the Act, subsection 178(2)(d) of the Act has no application in the present circumstances.

This Statement is made this 30^{+1} day of November, 2016.

James Samsoondar Director

CHROMEDX LTD.

The undersigned, being the sole director of **CHROMEDX LTD**. (the "**Company**"), hereby consents by his signature to the following resolutions pursuant to the *Business Corporations Act* (Ontario) (the "**Act**"):

AMALGAMATION WITH CHROMEDX CORP.

WHEREAS the Company is a wholly-owned subsidiary of, and has agreed to amalgamate with

ChroMedX Corp. (the "Parent"), pursuant to section 177(1) of the Act;

NOW THEREFORE BE IT RESOLVED THAT:

1. the amalgamation of the Company and the Parent under the Act, pursuant to section 177(1) thereof, is hereby approved;

2. upon the issuance of a certificate of amalgamation pursuant to subsection 178(4) of the Act, all shares in the capital of the Company, including all shares which have been issued and are outstanding at the date hereof, shall be cancelled without any repayment of capital in respect thereof;

3. the articles of amalgamation and the by-laws of the amalgamated company shall be the same as the articles of incorporation and by-laws of the Parent;

4. no securities shall be issued and no assets shall be distributed by the amalgamated corporation in connection with the amalgamation; and

5. any director or officer of the Company is hereby authorized to do all things and execute all instruments and documents necessary or desirable to carry out and give effect to the foregoing, including the execution and filing of articles of amalgamation.

DATED this 30th day of November, 2016.

James Samsoondar

CHROMEDX CORP.

The undersigned, being all of the directors of CHROMEDX CORP. (the "Company"), hereby consent by their signatures to the following resolution pursuant to the provisions of the *Business* Corporations Act (Ontario) (the "Act"):

AMALGAMATION WITH CHROMEDX LTD.

WHEREAS the Company has agreed to amalgamate with its wholly-owned subsidiary,

ChroMedX Ltd. ("Subco"), pursuant to section 177(1) of the Act;

NOW THEREFORE BE IT RESOLVED THAT:

1. the amalgamation of the Company and Subco pursuant to section 177(1) of the Act is hereby approved;

2. upon the issuance of a certificate of amalgamation pursuant to section 178(4) of the Act, all shares in the capital of Subco, including all shares which have been issued and are outstanding at the date hereof, are hereby cancelled without any repayment of capital in respect thereof;

3. the articles of amalgamation and by-laws of the amalgamated company shall be the same as the articles of incorporation and by-laws of the Company;

4. no securities shall be issued and no assets shall be distributed by the amalgamated company in connection with the amalgamation;

5. any director or officer of the Company is hereby authorized to do all things and execute all instruments and documents necessary or desirable to carry out and give effect to the foregoing, including the execution and filing of articles of amalgamation; and

6. the directors hereby consent to the execution of this resolution in counterparts and delivered by facsimile or other electronic transmission, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

DATED this $3d^{k}$ day of November, 2016.

James Samsoondar Gerard Edwards

Michael Minder

Ash Kaushal

CHROMEDX CORP.

The undersigned, being all of the directors of CHROMEDX CORP. (the "Company"), hereby consent by their signatures to the following resolution pursuant to the provisions of the *Business* Corporations Act (Ontario) (the "Act"):

AMALGAMATION WITH CHROMEDX LTD.

WHEREAS the Company has agreed to amalgamate with its wholly-owned subsidiary,

ChroMedX Ltd. ("Subco"), pursuant to section 177(1) of the Act;

NOW THEREFORE BE IT RESOLVED THAT:

1. the amalgamation of the Company and Subco pursuant to section 177(1) of the Act is hereby approved;

2. upon the issuance of a certificate of amalgamation pursuant to section 178(4) of the Act, all shares in the capital of Subco, including all shares which have been issued and are outstanding at the date hereof, are hereby cancelled without any repayment of capital in respect thereof;

3. the articles of amalgamation and by-laws of the amalgamated company shall be the same as the articles of incorporation and by-laws of the Company;

4. no securities shall be issued and no assets shall be distributed by the amalgamated company in connection with the amalgamation;

5. any director or officer of the Company is hereby authorized to do all things and execute all instruments and documents necessary or desirable to carry out and give effect to the foregoing, including the execution and filing of articles of amalgamation; and

6. the directors hereby consent to the execution of this resolution in counterparts and delivered by facsimile or other electronic transmission, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

DATED this 30^{+1} day of November, 2016.

George Langdon

James Samsoondar

Michael Minder

Ash Kaushal

Gerard Edwards

LEGEND FOR BY-LAW OF

CHROMEDX CORP.

PREDECESSOR CORPORATION ADOPTED ON AMALGAMATION

By virtue of the amalgamation of ChroMedX Corp. and ChroMedX Ltd. by Certificate and Articles of Amalgamation effective January 31, 2017, By-Law No. 1-2014 of ChroMedX Corp., one of the amalgamating corporations, became the general By-law of the amalgamated corporation.

BY-LAW NO. 1-2014

A by-law relating generally to the conduct of the affairs of

CHROMEDX CORP.

(hereinafter called the "Corporation")

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

SECTION 1 INTERPRETATION

Section 1.1 Definitions.

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

"Act" means the *Business Corporations Act*, R.S.O. 1990, c. B.16 and the regulations made thereunder, as from time to time amended, and every statute or regulation that may be substituted therefor;

"appointed" includes "elected" and vice versa;

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

"board" means the board of directors of the Corporation and "director" means a member of the board;

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

"meeting of shareholders" includes 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 *Legislation Act* (Ontario), 2006, S.O. 2006, c. 21, Sched. F, as from time to time amended, and every statute or regulation that may be substituted therefor;

"offering corporation" means a corporation as defined in the Act;

"**public announcement**" shall mean disclosure in a press release reported by a national news service in Canada, or in a document publicly filed by the Corporation under its profile on the System of Electronic Document Analysis and Retrieval at www.sedar.com;

"**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;

"**recorded address**" means, in the case of a shareholder, the shareholder's 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 is more than one; and, in the case of a director, officer, auditor or member of a committee of the board, the latest address of such person as shown in the records of the Corporation or in the most recent notice filed under the *Corporations Information Act* (Ontario) or any statute that may be substituted for it, whichever, to the knowledge of the Corporation, is the more current; and

"**signing officer**" means, in relation to any instrument, any person authorized to sign on behalf of the Corporation by section 2.4 of this by-law or by a resolution passed pursuant thereto;

Section 1.2 Interpretation.

Unless defined in section 1.1, words and expressions defined in the Act have the same meanings when used herein. Words importing the singular number include the plural and vice versa. Words importing gender include the feminine, masculine and neuter genders. Words importing a person include an individual, sole proprietorship, partnership, unincorporated association, unincorporated syndicate, trust, unincorporated organization, body corporate and a natural person in his or her capacity as trustee, executor, administrator, or other legal representative.

SECTION 2 BUSINESS OF THE CORPORATION

Section 2.1 Registered Office.

The registered office of the Corporation shall be at the location in Ontario initially specified in the articles of the Corporation, and thereafter, provided same is permitted under the Act, from time to time the Corporation may (i) by resolution of the directors change the location of the registered office of the Corporation within a municipality or geographic township, and (ii) by special resolution, change the municipality or geographic township in which its registered office is located to another place in Ontario.

Section 2.2 Corporate Seal.

The Corporation may, but need not, have a corporate seal and if one is adopted it shall be in a form approved from time to time by the board.

Section 2.3 Financial Year.

The board may, by resolution, fix the financial year end of the Corporation, and the board may from time to time, by resolution, change the financial year of the Corporation.

Section 2.4 Execution of Instruments.

Deeds, transfers, assignments, contracts, obligations, certificates and other instruments may be signed on behalf of the Corporation by any one of the following: by any one person who holds the office of chair of the board, chief executive officer, president, chief financial officer, executive vice-president, senior vice-president, secretary, treasurer, assistant secretary or the holder of any other office created from time to time by by-law or the board. In addition, the board may from time to time direct by resolution the manner in which and the person or persons by whom any particular instrument or class of instruments may or shall be signed. Any signing officer may affix the corporate seal to any instrument requiring the same.

Section 2.5 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.

Section 2.6 Voting Rights in Other Bodies Corporate.

The signing officers of the Corporation under section 2.4 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 person or 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 person by whom any particular voting rights or class of voting rights may or shall be exercised.

SECTION 3 BORROWING AND SECURITY

Section 3.1 Borrowing Power.

Without limiting the borrowing powers of the Corporation as set forth in the Act, but subject to the articles, 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 debt obligations of the Corporation;
- (c) give a guarantee on behalf of the Corporation to secure performance of any obligation of any person; and
- (d) mortgage, hypothecate, pledge or otherwise create a security interest in 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.

Section 3.2 Delegation.

Subject to the Act and the articles, 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 3.1 or by the Act to such extent and in such manner as the board may determine at the time of each such delegation.

SECTION 4 DIRECTORS

Section 4.1 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, provided, however, that for so long as the Corporation is an offering corporation, the board shall consist of not fewer than three directors.

Section 4.2 Qualification.

A person shall be disqualified from being a director of the Corporation if such person is less than 18 years of age, has been found under the *Substitute Decisions Act* (Ontario) or under the *Mental Health Act* (Ontario) to be incapable of managing property, has been found to be incapable by a court in Canada or elsewhere, is not an individual, or has the status of a bankrupt. A director need not be a shareholder. The board shall be comprised of the number of Canadian residents as may be prescribed from time to time by the Act.

Section 4.3 Election and Term.

The election of directors shall take place at each annual meeting of shareholders. Subject to the Act, each director shall cease to hold office at the close of the first annual meeting of shareholders following his or her election, but, if qualified, shall be eligible for re-election at such annual meeting. Subject to the Act and section 4.1, the number of directors to be elected at any such meeting shall be the number of directors determined from time to time by special resolution or, if the special resolution empowers the directors to determine the number, by resolution of the board. The election shall be by ordinary resolution. If directors are not elected at a meeting of shareholders, the incumbent directors shall continue in office until their successors are elected.

Section 4.4 Advanced Notice.

- (a) Subject to the provisions of the Act and the articles, a nominee will not be eligible for election as director of the Corporation unless such nomination is made in accordance with the following procedures. Nominations of a person for election to the board may be made at any annual meeting of shareholders, or at any special meeting of shareholders if one of the purposes for which the special meeting was called was the election of directions, (a) by or at the director of the board or an authorized officer of the Corporation, including pursuant to a notice of meting; (b) by or at the direction or request of one or more shareholders pursuant to a proposal made in accordance with the provisions of the Act or a requisition of the shareholder made in accordance with the provisions of the Act or (c) by any person (a "Nominating Shareholder") (i) who, at the close of business on the date of the giving of the notice provided for below in this section 4.4 and on the record date for notice of such meeting, is entered in the securities register as a holder of one or more shares carrying the right to vote at such meeting or who beneficially owns shares that are entitled to be voted at such meeting and (ii) who complies with the notice procedures set forth below in this section 4.4.
- (b) In addition to any other applicable requirements, for a nomination to be made by a Nominating Shareholder, the Nominating Shareholder must have given timely notice thereof in proper written form to the secretary of the Corporation at the registered office of the Corporation in accordance with this section 4.4.
- (c) To be timely, a Nominating Shareholder's notice to the secretary of the Corporation must be made (i) in the case of an annual meeting of shareholders, not less than 30 nor more than 65 days prior to the date of the annual meeting of shareholders; provided, however, that in the event that the annual meeting of shareholders is called for a date that is less than 50 days after the date (the "Notice Date") on which the first public announcement of the date of the annual meeting was made, notice by the Nominating Shareholder may be made not later than the close of business on the tenth (10th) day following the Notice Date; and (ii) in the case of a special meeting (other than an annual meeting) of shareholders called for the purpose of electing directors (whether or not called for other purposes), not later than the close of business on the fifteenth (15th) day following the day on which the first public announcement of a meeting of shareholders was made. In no event shall any adjournment or postponement of a meeting of shareholders or the announcement thereof commence a new time period for the giving of a Nominating Shareholder's notice as described above.
- (d) To be in proper written form, a Nominating Shareholder's notice to the secretary of the Corporation must set forth (i) as to each person whom the Nominating Shareholder proposes to nominate for election as a director (A) the name, age, business address and residence address of the person (B) the principal occupation or employment of the person (C) the class or series and number of shares in the share capital of the Corporation which are controlled or which are owned beneficially or of record by the person as of the record date for the meeting of shareholders (if such date shall then have been made publicly available and shall have occurred) and as of the date of such notice, and (D) any other information relating to the person that would be required to be disclosed in a dissident's proxy circular in connection with solicitations of proxies for election of directors pursuant to the Act and applicable securities legislation; and (ii) as to the Nominating Shareholder giving the notice, any proxy, contract, arrangement, understanding or relationship pursuant to which such Nominating Shareholder has a right to vote any shares of the Corporation and any other information relating to such Nominating Shareholder that would be required to be made in a dissent's proxy circular in connection with solicitations of proxies for election of directors pursuant to the Act and applicable securities legislation. The Corporation may require any proposed nominee to furnish such other information as may reasonably be required by the Corporation to determine the eligibility of such proposed nominee to serve as an independent director of the Corporation or that could be material to a reasonable shareholder's understanding of the independence, or lack thereof, of such proposed nominee.

- (e) No person shall be eligible for election as a director of the Corporation unless nominated in accordance with the provisions of this section 4.4; provided, however, that nothing in this section 4.4 shall be deemed to preclude discussion by a shareholder (as distinct from the nomination of directors) at a meeting of shareholders of any matter in respect of which it would have been entitled to submit a proposal pursuant to the provisions of the Act. The chairman of the meeting shall have the power and duty to determine whether a nomination was made in accordance with the procedures set forth in the foregoing provisions and, if any proposed nomination is not in compliance with such foregoing provisions, to declare that such defective nomination shall be disregarded.
- (f) Notwithstanding any other provision of the by-laws, notice given to the secretary of the Corporation pursuant to this section 4.4 may only be given by personal delivery, facsimile transmission or by email (at such email address as stipulated from time to time by the secretary of the Corporation for purposes of this notice), and shall be deemed to have been given and made only at the time it is served by personal delivery, email (at the address as aforesaid) or sent by facsimile transmission (provided that receipt of confirmation of such transmission has been received) to the secretary of the Corporation at the address of the registered office of the Corporation; provided that if such delivery or electronic communication is made on a non-business day or later than 5:00 p.m. (Toronto time) on a day which is a business day, then such delivery or electronic communication shall be deemed to have been made on the subsequent day that is a business day.
- (g) Notwithstanding the foregoing, the board may, in its sole discretion, waive any requirement in this section 4.4.

Section 4.5 Removal of Directors.

Subject to the Act, the shareholders may by ordinary resolution passed at an annual or special meeting of shareholders remove any director from office and the vacancy created by such removal may be filled by the election of any qualified individual at the same meeting, failing which it may be filled by the board.

Section 4.6 Vacation of Office.

A director ceases to hold office when he or she dies; he or she is removed from office by the shareholders; he or she ceases to be qualified for election as a director, or his or her written resignation is received by the Corporation, or, if a time is specified in such resignation, at the time so specified, whichever is later.

Section 4.7 Vacancies.

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

Section 4.8 Action by the Board.

The board shall manage or supervise the management of the business and affairs of the Corporation. The powers of the board may be exercised at a meeting (subject to sections 4.9 and 4.10) 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 or vacancies in the board, the remaining directors may exercise all the powers of the board so long as a quorum remains in office.

Section 4.9 Meetings by Telephone.

If all the directors of the Corporation consent thereto generally or if all the directors of the Corporation present at or participating in the meeting consent, a director may participate in a meeting of the board or a committee of the board by means of telephone, electronic or other communications facilities as permit all persons participating in the meeting to communicate with each other, simultaneously and instantaneously, and a director participating in such meeting by such means shall be 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. If a majority of the directors participating in a meeting held pursuant to this section are then in Canada, the meeting shall be deemed to have been held in Canada.

Section 4.10 Place of Meeting.

Meetings of the board shall be held at any place within or outside Ontario.

Section 4.11 Calling of Meetings.

Meetings of the board shall be held from time to time at such place (subject to section 4.10), at such time and on such day as the board, the chair of the board, the president or any two directors may determine.

Section 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 11 to each director (a) not less than 48 hours before the time when the meeting is to be held if the notice is mailed, or (b) not less than 24 hours before the time when the meeting is to be held if the notice is given personally or is delivered or sent by any means of transmitted or recorded communication; provided that no notice of a meeting shall be necessary if all the directors in office are present or if those absent waive notice of such meeting, except where a director attends a meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called. 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 or the general nature thereof to be specified.

Section 4.13 Attendance of Auditors.

The auditors of the Corporation shall be entitled to attend and be heard at meetings of the board on matters relating to their duties as auditors.

Section 4.14 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.

Section 4.15 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.

Section 4.16 Regular Meetings.

The board may appoint a day or days in any month or months for regular meetings at a place and hour to be named. A copy of any resolution of the board fixing the place and time of regular meetings 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 required the purpose thereof or the business to be transacted thereat to be specified.

Section 4.17 Chair.

The chair 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: the chair of the board, the chief executive officer, the president, an executive vice-president or a vice-president. If no such officer is present, the directors present shall choose one of their number to be chair.

Section 4.18 Quorum.

The quorum for the transaction of business at any meeting of the board shall be two-fifths of the number of directors

then in office or such greater number of directors as the board may from time to time determine.

Section 4.19 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 chair of the meeting shall be entitled to a second or casting vote.

Section 4.20 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 transaction or proposed material contract or transaction with the Corporation shall disclose to the Corporation the nature and extent of that interest at the time and in the manner provided by the Act. Such a director shall not attend any part of a meeting of directors during which the contract or transaction is discussed and shall not vote on any resolution to approve the same except as permitted by the Act. If no quorum exists for the purpose of voting on such a resolution only because a director is not permitted to be present at the meeting, the remaining directors shall be deemed to constitute a quorum for the purposes of voting on the resolution.

Section 4.21 Remuneration and Expenses.

The directors shall be paid such remuneration for their services as directors 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 4.22 Resolution in Lieu of Meeting.

A resolution in writing signed by all the directors entitled to vote on that resolution at a meeting of the board or a committee of the board is as valid as if it had been passed at a meeting of the board or committee of the board. A resolution in writing takes effect on the day on which the last director who is entitled and required to sign the resolution signs it. A resolution in writing may be signed in one or more counterparts and such counterparts taken together shall constitute the same resolution. A counterpart signed by a director and transmitted by facsimile or other device capable of transmitting a printed message is as valid as an originally signed counterpart.

SECTION 5 COMMITTEES

Section 5.1 Committees of the Board.

The board may appoint from its number 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.

Section 5.2 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 Ontario.

Section 5.3 Audit Committee.

If the Corporation is an offering corporation the board shall elect annually from among its number an audit committee to composed of not fewer than three directors, each of whom shall be eligible to serve as a member of an audit committee under the Act, applicable securities legislation and applicable stock exchange rules. The audit committee shall have the powers and duties provided in the Act and in any committee charter as may be adopted by the board from time to time.

Section 5.4 Advisory Bodies.

The board may from time to time appoint such advisory bodies as it may deem advisable.

Section 5.5 Procedure.

Unless otherwise determined by the board, each committee of the board and each advisory board shall have power to fix its quorum at not less than two-fifths of its members, to elect its chair and to regulate its procedure.

SECTION 6 OFFICERS

Section 6.1 Appointment.

The board may from time to time appoint a chief executive officer, president, one or more senior or executive vicepresidents (to which title may be added words indicating 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 section 6.4, an officer of the Corporation may but need not be a director.

Section 6.2 Chief Executive Officer.

The board may designate one of its officers of the Corporation as chief executive officer of the Corporation and may from time to time revoke any such designation and designate another officer of the Corporation as chief executive officer of the Corporation. The officer designated as chief executive officer shall, subject to the authority of the board, have general supervision and control of the affairs of the Corporation.

Section 6.3 Chief Financial Officer.

The board may designate one of the officers of the Corporation as chief financial officer of the Corporation and may from time to time revoke any such designation and designate another officer of the Corporation as chief financial officer of the Corporation. The officer designated as chief financial officer shall have such duties and exercise such powers as the board may from time to time prescribe.

Section 6.4 Chair of the Board.

The board may from time to time also appoint a chair of the board who shall be a director. If appointed, the chair of the board shall, if present, preside at all meetings of the board and shareholders. In addition, he or she shall have such other powers and duties as the board may specify by resolution or as are incident to his or her office.

Section 6.5 Vice Chair of the Board.

The board may from time to time also appoint a vice chair of the board who shall be a director. If appointed, he or she shall have such powers and duties as the board may specify by resolution or as are incident to his or her office.

Section 6.6 President.

Unless otherwise designated by the board in accordance with section 6.2, the president shall be the chief executive officer of the Corporation and, subject to the authority of the board and the powers designated to the chief executive officer (if the chief executive officer is not also the president), shall have general supervision of the affairs and business of the Corporation. During the absence or disability of the president, his or her duties shall be performed and his or her powers exercised by the officer or officers of the Corporation designated from time to time by the board.

Section 6.7 Executive or Senior Vice-President.

An executive or senior vice-president shall have such powers and duties as the board or the president may prescribe.

Section 6.8 Secretary.

Unless otherwise determined by the board, the secretary shall attend, and be the secretary of, all meetings of the board, shareholders and committees of the board. The secretary shall enter or cause to be entered in records kept for that purpose minutes of all proceedings at meetings of the board, the shareholders and committees of the board, whether or not he or she attends such meetings. He or she shall give or cause to be given, as and when instructed, all notices to directors, shareholders, auditors and members of committees of the board. He or she 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 otherwise may be specified.

Section 6.9 Treasurer.

The board may designate a treasurer who, subject to any resolution of the board and under the direction of the board, 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. Subject to any resolution of the board, he or she shall render to the board whenever required an account of all his or her transactions as treasurer and of the financial position of the Corporation and he or she shall have such other powers and duties as otherwise may be specified.

Section 6.10 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 Act, vary, add to or limit the powers and duties of an 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.

Section 6.11 Term of Office.

The board, in its discretion, or the president may remove any officer of the Corporation without prejudice to any officer's rights under any employment contract. Otherwise each officer appointed by the board shall hold office until his or her successor is appointed or until his or her earlier resignation.

Section 6.12 Terms of Employment and Remuneration.

The terms of employment and the remuneration of officers elected or appointed by the board shall be settled by it from time to time.

Section 6.13 Agents and Attorneys.

The board shall have power from time to time to appoint agents or attorneys for the Corporation within or outside of

Canada with such powers (including the power to sub-delegate) of management, administration or otherwise as may be thought fit.

Section 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

Section 7.1 Limitation of Liability.

Every director and officer of the Corporation in exercising his or her powers and discharging his or her duties shall act honestly and in good faith with a view to the best 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 by order of the board 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 or her part, or for any other loss, damage or misfortune which shall happen in the execution of the duties of his or her office or in relation thereto, unless the same are occasioned by his or her own willful neglect or default, provided that nothing herein shall relieve any director or officer of any liability imposed upon him or her by the Act.

Section 7.2 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 or her heirs, executors, administrators and other legal personal representatives, against all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by him or her in respect of any civil, criminal or administrative action or proceeding to which he or she is made a party by reason of having been a director or officer of the Corporation or body corporate of which the Corporation is or was a shareholder or creditor, if (a) he or she 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 enforced by a monetary penalty, he or she had reasonable grounds for believing that his or her conduct was lawful. The Corporation may also indemnify that person in such other circumstances as the Act or law permits or requires. Nothing in this by-law.

Section 7.3 Advance of Costs.

The Corporation shall advance moneys to a director, officer or other individual for the costs, charges and expenses of a proceeding referred to in section 7.2. The individual shall repay the moneys if the individual does not fulfil the conditions of section 7.2.

Section 7.4 Insurance.

Subject to the Act, the Corporation may purchase and maintain such insurance for the benefit of its directors and officers as the board may from time to time determine.

SECTION 8 SHARES

Section 8.1 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 in such manner and to such persons or class of persons as the board shall by resolution determine, provided that no share shall be issued until it is fully paid as provided by the Act.

Section 8.2 Commissions.

The board may from time to time authorize the Corporation to pay a reasonable commission to any person in consideration of such person 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.

Section 8.3 Transfer Agents and Registrars.

The board may from time to time by resolution appoint a registrar to keep the register of security holders and a transfer agent to keep the register of transfers and may also appoint one or more branch registrars to keep branch registers of security holders and one or more branch transfer agents to keep 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.

Section 8.4 Registration of Transfer.

Subject to the Act, no transfer of shares shall be registered in a register of transfers or branch register of transfers except upon presentation of the certificate representing the share endorsement made on or delivered with it which complies with the Act, duly executed by the appropriate person as provided by the Act, together with such reasonable assurance or evidence of signature, identification and authority to transfer as the board may from time to time prescribe, and on payment of all applicable taxes and any reasonable fees prescribed by the board, and compliance with such restrictions on transfer as are authorized by the articles, if any, and on satisfaction of any lien referred to in section 8.5.

Section 8.5 Lien for Indebtedness.

The Corporation shall have a lien on the shares registered in the name of a shareholder who is indebted to the Corporation except where such class or series of shares of the Corporation is listed on a stock exchange, and the lien may be enforced, subject to the articles, by the sale of the shares affected by it or by any other action, suit, remedy or proceeding authorized or permitted by law or by equity and, pending enforcement, the Corporation may refuse to register a transfer of the whole or any part of those shares.

Section 8.6 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.

Section 8.7 Share Certificates.

Every holder of one or more fully paid shares of the Corporation shall be entitled, at his or her option, to a share

certificate, or to a non-transferable written certificate of acknowledgement of his or her right to obtain a share certificate, stating the number and class or series of shares held by him or her as shown on the securities register, and stating that such shares are fully paid. Share certificates shall be in such form as the board shall from time to time approve and shall be signed in accordance with section 2.4 and need not be under the corporate seal; provided that, unless the board otherwise orders, certificates representing shares in respect of which a transfer agent, registrar, or both has been appointed shall not be valid unless countersigned by or on behalf of such transfer agent or registrar. The signature of one of the signing officers or, in the case of share certificates which are not valid unless countersigned by or on behalf of a transfer agent or registrar, the signatures of both signing officers may be mechanically reproduced upon share certificates and every such 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 share certificate executed as aforesaid shall be valid notwithstanding that one or both of the officers whose signature appears thereon no longer holds office at the date of issue or delivery of the certificate.

Section 8.8 Replacement of Share Certificates.

The board or any officer or agent designated by the board may in its or his or her discretion direct the issue of a new share certificate or other such certificate in lieu of and on cancellation of a share certificate that has been mutilated or in substitution for a certificate claimed to have been lost, apparently 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.

Section 8.9 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 of that share, and delivery of the certificate to one of those persons shall be sufficient delivery to all of them. Any one of those persons may give effectual receipts for the certificate issued in respect of it or for any dividend, bonus, return of capital or other money payable or warrant issuable in respect of that share.

Section 8.10 Deceased Shareholders.

In the event of the death of a holder, or of one of the joint holders, of any share, the Corporation shall not be required to make any entry in the register of shareholders in respect of the death or to make any dividend or other payments in respect of the share except on production of all such documents as may be required by law and on compliance with the reasonable requirements of the Corporation and its transfer agents.

SECTION 9 DIVIDENDS AND RIGHTS

Section 9.1 Dividends.

Subject to the Act and the articles, 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 the issue of fully paid shares of the Corporation or options or rights to acquire fully paid shares of the Corporation. Any dividend unclaimed after a period of two years from the date on which it has been declared to be payable shall be forfeited and shall revert to the Corporation.

Section 9.2 Dividend Cheques.

A dividend payable in money 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 or her address appearing on the securities register, unless such holder otherwise directs. In the case of joint holders, the cheque shall, unless such joint holders otherwise jointly direct, be made payable to the order of all the joint holders and mailed to them at the address appearing on the register of shareholders in respect of such joint holding, or to the first address so appearing if there are more than one. The mailing of such cheque, unless it is not paid on due presentation, shall satisfy and discharge the liability for the dividend to the extent of the sum represented by it plus the amount of any tax which the Corporation is required to and does withhold.

Section 9.3 Non-Receipt of Cheques.

In the event of non-receipt of any dividend cheque by the person to whom it is sent, 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.

Section 9.4 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 the dividend or to exercise the right to subscribe for such securities, and notice of any such record date shall be given not less than seven days before the record date in the manner provided by the Act. In every such case, only persons who are shareholders of record at the close of business on the record date so fixed shall be entitled to receive payment of such dividend or to exercise the right to subscribe for such securities and to receive the warrant or other evidence in respect of such right, notwithstanding the transfer or issue of any shares after the record date is fixed.

SECTION 10 MEETINGS OF SHAREHOLDERS

Section 10.1 Annual Meetings.

The annual meeting of shareholders shall be held at such time in each year and, subject to section 10.3, at such place as the board, the chair of the board may from time to time determine, for the purpose of receiving the reports and statements required by the Act to be laid before the annual meeting, electing directors, appointing auditors and fixing or authorizing the board to fix the remuneration of the auditors, and for the transaction of such other business as may properly be brought before the meeting.

Section 10.2 Special Meetings.

The board or the chair of the board shall have power to call a special meeting of shareholders at any time.

Section 10.3 Place of Meetings.

Meetings of shareholders shall be held at such place within or outside Ontario as the directors determine or, in the absence of such determination, at the place where the registered office of the Corporation is located.

Section 10.4 Participation in Meeting by Electronic Means.

Any person entitled to attend a meeting of shareholders may participate in the meeting, in accordance with the Act, by means of a telephonic, electronic or other communication facility that permits all participants to communicate adequately with each other during the meeting, if the Corporation makes available such a communication facility. A person participating in a meeting by such means is deemed for the purposes of the Act to be present at the meeting.

Section 10.5 Meeting held by Electronic Means.

If the directors or the shareholders of the Corporation call a meeting of shareholders pursuant to the Act, those directors or shareholders, as the case may be, may determine that the meeting shall be held, in accordance with the Act, entirely by means of a telephonic, electronic or other communication facility that permits all participants to communicate adequately with each other during the meeting.

Section 10.6 Notice of Meetings.

Notice of the time and place of each meeting of shareholders shall be sent in the manner provided in Section 11 not less than 10 days, or if the Corporation is an offering corporation not less than 21 days, but in either case not 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 special meeting of shareholders shall state the nature of the business in sufficient detail to permit the shareholder to form a reasoned judgement on it and shall give the text of any ordinary resolution, special resolution, or by-law to be submitted to the special meeting.

Section 10.7 List of Shareholders Entitled to Notice.

For every meeting of shareholders, the Corporation shall prepare a list of shareholders entitled to receive notice of the meeting. The list shall be arranged in alphabetical order and show the number of shares held by each shareholder entitled to vote at the meeting. If a record date for the meeting is fixed pursuant to section 10.8, the shareholders listed shall be those registered at the close of business on that 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, on 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 central securities register is maintained and at the meeting for which the list was prepared.

Section 10.8 Record Date for Notice.

The board may fix in advance a date, preceding the date of any meeting of shareholders by not more than 60 days and not less than 30 days, as a record date for the determination of the shareholders entitled to notice of the meeting, and notice of any such record date shall be given not less than seven days before such record date, by newspaper advertisement in the manner provided in the Act and by written notice to each stock exchange in Canada on which the shares of the Corporation are listed for trading. If no such record date is so fixed, 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.

Section 10.9 Meetings Without Notice.

A meeting of shareholders may be held without notice at any time and at any place permitted by the Act or the articles (a) if all the shareholders entitled to vote thereat are present in person or duly 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, or otherwise consent to the meeting being held; so long as the 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 may transact at a meeting of shareholders.

Section 10.10 Chair, Secretary and Scrutineers.

The chair of the board, if such an officer has been elected or appointed and is present, otherwise another director of the Corporation who is a shareholder of the Corporation, shall be chair of any meeting of shareholders. If no such person 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 chair. If the secretary of the Corporation is absent, the chair 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 chair with the consent of the meeting.

Section 10.11 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 the auditors of the Corporation and others who, although not entitled to vote, are entitled or required under 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 chair of the meeting or with the consent of the meeting.

Section 10.12 Quorum.

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. 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 even if a quorum is not present throughout the meeting.

If a quorum is not present at the time appointed for the meeting or within a reasonable time after that which the shareholders may determine, the shareholders present or represented may adjourn the meeting to a fixed time and place but may not transact any other business.

Section 10.13 Right to Vote.

Every person named in the list referred to in section 10.7 shall be entitled to vote the shares shown on the list opposite his or her name at the meeting to which the list relates.

Section 10.14 Proxyholders and Representatives.

Every shareholder entitled to vote at a meeting of shareholders may appoint a proxyholder, or one or more alternate proxyholders, as his or her nominee 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 or her attorney and shall conform to the requirements of the Act. Alternatively, every 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 that 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 the resolution, or in such other manner as may be satisfactory to the secretary of the Corporation or the chair of the meeting. Any such proxyholder or representative need not be a shareholder.

Section 10.15 Time for Deposit of Proxies.

The board may fix a time, not exceeding 48 hours, excluding non-business days, preceeding any meeting or adjourned meeting of shareholders before which time proxies to be used at the meeting must be deposited with the Corporation or its agent, and any time so fixed shall be specified in the notice calling the meeting. A proxy shall be acted on only if, prior to the time so fixed and specified in the notice calling the meeting, it has been deposited with the Corporation or its agent or, if no such time is specified in the notice, it has been received by the secretary of the Corporation or by the chair of the meeting or any adjournment thereof before the time of voting.

Section 10.16 Personal Representative.

If the shareholder of record is deceased, his or her personal representative, upon filing with the secretary of the meeting sufficient proof of his or her appointment, shall be entitled to exercise the same voting rights at any meeting of shareholders as the shareholder of record would have been entitled to exercise if he or she were living, and for the purposes of the meeting shall be considered a shareholder. If there is more than one personal representative, the provisions of section 10.17 shall apply.

Section 10.17 Joint Shareholders.

If two or more persons hold shares jointly, any one of them present in person or duly represented by proxy at a meeting of shareholders may, in the absence of the other or others, vote the shares; but if more than one of them are present in person or represented by proxy and vote, they shall vote together as one on the shares jointly held by them.

Section 10.18 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 chair of the meeting shall not be entitled to a second or casting vote.

Section 10.19 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 chair 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.

Section 10.20 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 chair 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 chair 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 such person 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.

Section 10.21 Adjournment.

The chair 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 will not be necessary to give notice of the adjourned meeting, other than by announcement at the earliest meeting that is adjourned. 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.

SECTION 11 NOTICES

Section 11.1 Method of Giving Notices.

Any notice (which term includes any communication or document) to be given (which term includes sent, transmitted, 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, if mailed to such person at the person's recorded address by prepaid mail, or if transmitted by telephone, facsimile or other electronic means in accordance with the *Electronic Commerce Act* (Ontario). 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 by dispatch. A notice so delivered shall be deemed to have been received when it is delivered personally, a notice so mailed shall be deemed to have been received at the time it would be delivered in the ordinary course of mail, and a notice so transmitted shall be deemed to have been received on the day it is transmitted. 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 the secretary to be reliable.

Section 11.2 Notice to Joint Shareholders.

If two or more persons are registered as joint holders of any share, notice to one of such persons shall be sufficient notice to all of them. Any notice shall be addressed to all of such joint holders and the address to be used for the purposes of section 11.1 shall be the address appearing on the securities register in respect of such joint holding, or the first address so appearing if there are more than one.

Section 11.3 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.

Section 11.4 Undelivered Notices.

If any notice given to a shareholder pursuant to section 11.1 is returned on three consecutive occasions because he or she cannot be found, the Corporation shall not be required to give any further notices to that shareholder until he or she informs the Corporation in writing of his or her new address.

Section 11.5 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 of the notice, shall not invalidate any action taken at any meeting held pursuant to such notice or otherwise founded on it.

Section 11.6 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 the share which has been duly given to the shareholder from whom he or she derives his or her title to the share before his or her name and address were entered on the securities register (whether the notice was given before or after the happening of the event upon which he or she became so entitled) and before he or she furnished the Corporation with the proof of authority or evidence of his or her entitlement prescribed by the Act.

Section 11.7 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 or her under the Act, the regulations, the articles, the by-laws or otherwise, and that 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 the 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.

Section 11.8 Electronic Documents.

A requirement under these by-laws that a notice, document or other information be provided in writing may be satisfied by providing an electronic document and a requirement under these by-laws for a signature or that a document be executed, in relation to an electronic document, may be satisfied, in each case, if the requirements in the Act in respect thereof are met.

SECTION 12 EFFECTIVE DATE

Section 12.1 Amendment and Restatement.

This amended and restated By-law No. 1-2014 amends, restates and supercedes all of the previous by-laws of the Corporation. The amendment and restatement shall not affect the previous operation of any by-law so amended and restated or repealed, or affect the validity of any act done or right, privilege, obligation or liability acquired or incurred under, or the validity of any contract or agreement made pursuant to, or the validity of any articles or predecessor charter documents of the Corporation obtained pursuant to, any such by-law before its amendment and restatement or repeal. All officers and persons acting under any by-law so amended and restated or repealed shall continue to act as if appointed under the provisions of this by-law and all resolutions of the board, the shareholders or committees of the board with continuing effect passed under any amended and restated or repealed by-law shall continue to be good and valid except to the extent inconsistent with this by-law and until amended or repealed.

Section 12.2 Effective Date.

This by-law shall come into force upon being passed by the board except with respect to those provisions, if any, which may require the prior approval of shareholders in which event those portions of this by-law shall come into effect upon having been approved by the shareholders.

ENACTED this 22nd day of July, 2014.

WITNESS the corporate seal of the Corporation.

adder

President'

Secretary

CONFIRMED by the shareholders in accordance with the Act the 29th day of August, 2014,

Secretary