



MICROMEM TECHNOLOGIES INC.

MANAGEMENT INFORMATION CIRCULAR as of July 23, 2020

ANNUAL GENERAL AND SPECIAL MEETING OF SHAREHOLDERS to be held on Tuesday, September 8, 2020

ADJUSTMENTS TO THE MEETING AS A RESULT OF COVID-19

Out of an abundance of caution and to proactively deal with the impact of the coronavirus (COVID-19) pandemic, and to mitigate risks to the health and safety of our shareholders, employees and other stakeholders, the annual general and special meeting (the “**Meeting**”) of the holders (the “**Shareholders**” or “**you**”) of common shares of Micromem Technologies Inc. (the “**Company**”) will be held in a virtual format only, and there will be no physical meeting location. Therefore, the Shareholders will have an equal opportunity to participate at the Meeting online. The Meeting will be held on Tuesday, September 8, 2020 at 10:00 a.m. EDT (Toronto time), virtually by Zoom, Meeting No. 933 0717 1474 (https://zoom.us/meeting/register/tJcud-6pqTouHdA6X0whqipv_qNIC1FzXhSl).

If you intend to attend at the Meeting, please register at the link provided above on or before Thursday, September 3, 2020 at 10:00 a.m. EDT (Toronto time). If you are not able to attend the Meeting, please vote by using the proxy form or voting instruction form included with the “notice and access” notification and return it according to the instructions provided before Thursday, September 3, 2020 at 10:00 a.m. EDT (Toronto time).

Please note that only registered shareholders and duly appointed proxyholders will be able to attend, participate and vote at the virtual Meeting by providing their full name. Voting at the Meeting will be conducted by roll call. You may join the Meeting via your smartphone, tablet or computer. Please ensure that you are connected to the internet at all times to be able to vote. On the day of the Meeting, you should log into the Meeting by 9:45 a.m. EDT (Toronto time) to confirm your attendance with the scrutineer of the Meeting.

Non-registered shareholders who have not duly appointed themselves as proxyholders may also virtually attend as guests. Guests will be able to virtually attend and listen to the Meeting but will not be able to vote or ask questions during the Meeting. If your shares are held by your broker or you are otherwise a beneficial shareholder, please see the heading below entitled “Beneficial Holders of Shares” for information on how to vote.

GENERAL PROXY INFORMATION

SOLICITATION OF PROXIES

This management information circular (the “Circular”) is furnished in connection with a solicitation of proxies being made by the management of the Company for use at the Meeting of Shareholders of the Company to be held at the date, place and time and at any adjournment thereof, for the purposes set forth in the notice of the Meeting and at any adjournment thereof.

Except as otherwise stated, the information provided in this Circular is given as of July 23, 2020.

The solicitation of proxies by the Company will be made primarily by mail, but may also be carried out by directors, officers and employees of the Company who will not receive any additional compensation for such services. The cost of the solicitation by management will be borne by the Company.

The record date for determining the Shareholders entitled to notice of, and to attend and vote their shares at, the Meeting is July 23, 2020 (the “**Record Date**”).

NOTICE-AND-ACCESS REGIME

National Instrument 54-101 – *Communication with Beneficial Owners of Securities of a Reporting Issuer* (“**NI 54-101**”) and National Instrument 51-102 – *Continuous Disclosure Obligations* (“**NI 51-102**”) allow for the use of a “notice-and-access” regime for the delivery of proxy-related materials such as our Circular (“**Meeting Materials**”).

Under the notice-and-access regime, reporting issuers are permitted to deliver the Proxy Materials by posting them on the System for Electronic Data Analysis and Retrieval (“**SEDAR**”) at www.sedar.com as well as a website other than SEDAR and sending a notice package (the “**Notice Package**”) to each shareholder receiving the Meeting Materials under this regime. The Notice Package should include: (i) the relevant form of proxy or voting instruction form; (ii) basic information about the meeting and the matters to be voted on; (iii) instructions on how to obtain a paper copy of the Meeting Materials; and (iv) a plain-language explanation of how the new notice-and-access system operates and how the Meeting Materials can be accessed online. Where prior consent has been obtained, a reporting issuer can send the Notice Package to Shareholders electronically. The Notice Package must be mailed to Shareholders from whom consent to electronic delivery has not been received.

The Company has elected to send its Meeting Materials to Shareholders using the notice-and-access regime. Accordingly, the Company will send the above-mentioned Notice Package to Company Shareholders which includes instructions on how to access the Company’s Meeting Materials online and how to request a paper copy of these materials. Distribution of the Company’s Meeting Materials pursuant to the notice-and-access regime benefits the Company through a substantial reduction in both postage and material costs, and also promotes environmental responsibility by decreasing the large volume of paper documents generated by printing proxy-related materials.

APPOINTMENT AND REVOCATION OF PROXIES

The persons named in the form of proxy prepared for the Meeting are directors and officers of the Company. **A Shareholder has the right to appoint as proxyholder a person (who is not required to be a Shareholder) other than the persons whose names are printed as proxyholders in the form of proxy, by striking out said printed names and inserting the name of his or her chosen proxyholder in the blank space provided for that purposes in the form of proxy** and delivering the completed proxy with the transfer agent of the Company, TSX Trust Company (“**TSX Trust**” or the “**Transfer Agent**”), at 100 Adelaide Street West, Suite 301, Toronto, Ontario M5H 4H1 (fax: 416-595-9593) no later than 10:00 a.m. EDT (Toronto time) on Thursday, September 3, 2020, or if the Meeting is adjourned, no later than 48 hours (excluding Saturday, Sunday and holidays) before such adjourned Meeting, as per the instructions on the form of proxy.

Non-registered shareholders desiring to appoint a person other than the person named on the voting instruction form (of other instrument provided for the Meeting) to attend and act on his, her or its behalf at the Meeting may do so by following the instructions set out therein and delivering the required instrument by the deadlines set out above (or such earlier deadlines as may be set out in the voting instruction form or other instrument) to the party specified therein.

Each Shareholder is entitled to appoint a person to represent such Shareholder at the Meeting, who need not be one of the persons named in the accompanying form of proxy.

A proxy must be signed in writing or, subject to the means of electronic signature permitting a reliable determination that the document was created or communicated by or on behalf of the Shareholder or the attorney, as the case may be, by electronic signature by the Shareholder or an attorney who is authorized by a document that is signed in writing or by electronic signature or, if the Shareholder is a body corporate, by an officer or attorney of the body corporate duly authorized. A proxy given pursuant to this solicitation may be revoked by written instrument, including another proxy bearing a later date, executed by the Shareholder or by his, her, or its attorney authorized in writing, and deposited either at TSX Trust (100 Adelaide Street West, Suite 301, Toronto, Ontario, M5H 4H1, fax: 416-595-9593) or at the registered office of the Company (121 Richmond Street West Suite 304 Toronto, Ontario M5H 2K1) at any time up to and including the last business day preceding the day of the Meeting, or any adjournment thereof, at which the proxy is to be used, or with the chairman of such Meeting on the day of the Meeting, or adjournment thereof, or in any other manner permitted by law.

In addition to any other manner permitted by law, section 110(4) of the *Business Corporations Act* (Ontario) (the “OBCA”) provides that a shareholder may revoke a proxy before it is exercised by: (i) depositing an instrument in writing signed in the same manner as the proxy at the registered office of the Company at any time up to and including the last business day preceding the date of the Meeting, or any adjournment thereof, at which the proxy is to be used or with the chair of such Meeting on the day of the Meeting or an adjournment thereof; or (ii) transmitting, by telephonic or electronic means, a revocation that complies with the same requirements as the proxy and that, subject to the means of electronic signature permitting a reliable determination that the document was created or communicated by or on behalf of the shareholder or the attorney, as the case may be, is signed by electronic signature.

A Shareholder attending the Meeting has the right to vote and if he or she does so, his or her proxy is nullified with respect to the matters such person votes upon and any subsequent matters thereafter to be voted upon at the Meeting or any adjournment thereof.

BENEFICIAL HOLDERS OF SHARES

Shareholders who hold common shares through intermediaries (such as banks, trust companies, securities dealers or brokers or the trustee or administrator of a self-administered RRSP, RRIF, RESP, TSFA or similar plan) or who otherwise do not hold the common shares in their own name should note that only proxies deposited by persons whose names appear on the record of the Company may be recognized and acted upon at the Meeting. Common shares held through intermediaries by shareholders who have not received the Meeting materials directly from the Company or TSX Trust can only be voted for or against the matters to be considered at the Meeting by following instructions received from the intermediary through which those common shares are held. Without specific instructions from the beneficial holder, intermediaries are not required to vote the common shares held by them. The directors and officers of the Company do not know for whose benefit the common shares registered in the name of the intermediaries are held unless the beneficial holder has consented to the disclosure of such information to the Company.

Applicable securities laws require intermediaries to forward meeting materials and seek voting instructions from beneficial holders of common shares in advance of the Meeting. Intermediaries typically have their own mailing procedures and provide their own return instructions, which should be carefully followed by beneficial holders in order to ensure that their common shares are voted at the Meeting. Typically, intermediaries will use service companies to forward meeting materials and voting instructions to beneficial holders. Beneficial holders who receive Meeting Materials from an intermediary will generally either be provided with:

- (a) a form of proxy which has already been signed by the intermediary (typically by facsimile stamped signature), which is restricted as to the number of securities beneficially owned by the beneficial holder, but which is otherwise not completed by the intermediary. In this case, the beneficial holder who wishes to submit a proxy in respect of beneficially owned common shares should properly complete the remainder of this form of proxy and follow the instructions from the intermediary as to delivery; or
- (b) more typically, a voting instruction form, which must be completed, signed and delivered by the beneficial holder (or, if applicable, such other means as set out in the form) in accordance with the directions on the voting instruction form.

The purpose of these procedures is to permit beneficial holders to direct the voting of the common shares they beneficially own. If you are a beneficial holder who receives either a form of proxy or voting instruction form from an intermediary and you wish to attend and vote at the Meeting (or have another individual attend and vote on your behalf), you should strike out the names of the individuals named in the form of proxy and insert your name (or such other person’s name) in the blank space provided or, in the case of a voting instruction form, contact the intermediary. A beneficial holder should carefully follow the instructions of his or her intermediary and/or his or her intermediary’s service company.

Non-Objecting Beneficial Owners

The Meeting Materials are being sent to both registered and beneficial owners of the securities. If you are beneficial owner, the Company or its agent has sent these materials directly to you, your name and address, and information about your holdings of securities have been obtained in accordance with applicable securities regulatory requirements from the intermediary holding on your behalf. By choosing to send these materials to you directly, the

Company (and not the intermediary holding on your behalf) has assumed responsibility for (i) delivering these materials to you, and (ii) executing your proper voting instructions. Please return your voting instructions as specified in the request for voting instructions or form of proxy delivered to you.

EXERCISE OF DISCRETION BY PROXIES

The shares voted at the Meeting will be voted or withheld from voting in accordance with the instructions of the Shareholder on any ballot that may be called for. Where a choice is specified on a proxy, securities represented by the proxy will be voted in accordance with the choice so specified in the proxy. **WHERE NO CHOICE IS SPECIFIED, THE PROXY WILL CONFER DISCRETIONARY AUTHORITY AND WILL BE VOTED FOR THE ITEM OF BUSINESS AS SET OUT IN THE NOTICE OF MEETING AND AS STATED ELSEWHERE IN THIS MANAGEMENT INFORMATION CIRCULAR.**

The form of proxy also confers discretionary authority upon the persons named therein to vote with respect to any amendments or variations to the matter identified in the accompanying Notice of Meeting, and with respect to other matters which may properly come before the Meeting, in such manner as such nominee in his or her judgment may determine. **IF OTHER MATTERS WHICH ARE NOT PRESENTLY KNOWN TO MANAGEMENT SHOULD PROPERLY COME BEFORE THE MEETING, THE ACCOMPANYING PROXY WILL BE VOTED ON SUCH MATTERS IN ACCORDANCE WITH THE BEST JUDGEMENT OF THE PERSON OR PERSONS VOTING THE PROXY.** As of the date of this Management Information Circular, management of the Company knows of no such amendments, variations or other matters to come before the Meeting other than the matters referred to in the accompanying Notice of Meeting.

VOTING SHARES AND PRINCIPAL SHAREHOLDERS

The authorized capital of the Company consists of an unlimited number of common shares without nominal or par value and a maximum of 2,000,000 special preference shares. As of the Record Date, there were 387,998,308 outstanding common shares entitled to be voted at the Meeting. No special preference shares were issued or outstanding as of the Record Date. Each shareholder is entitled to one vote for each common share held. To the knowledge of the management of the Company, as of the Record Date, no person beneficially owned, directly or indirectly, or exercised control or direction over shares carrying more than 10% of the votes attached to all of the outstanding voting shares.

In accordance with the provisions of the OBCA, the Company will prepare a list of all persons who are registered holders of common shares as of the Record Date, and the number of common shares registered in the name of each person on such date.

VOTES NECESSARY TO PASS RESOLUTIONS

The resolution setting the number of directors at three (3) is a special resolution and must receive the affirmative vote of more than 2/3 of the votes cast at the Meeting. A simple majority of affirmative votes cast at the Meeting is required to pass the other resolutions described herein. Regarding the election of directors, if there are more nominees for election as directors than there are seats on the board of directors to be filled, those nominees receiving the greatest number of votes will be elected until all such vacancies have been filled. If the number of nominees for election is equal to the number of vacancies to be filled, all nominees will be declared elected by acclamation.

INTEREST OF CERTAIN PERSONS IN MATTERS TO BE ACTED UPON

No director or officer of the Company, no proposed nominee for election to the board of directors of the Company (the “**Board**”), and no associate or affiliate of any such person has any material interest, direct or indirect, in any matter to be acted upon at the Meeting, other than to the extent that directors may be considered to have an interest in votes relating to the amendment to the Company’s Stock Option Plan by virtue of equity incentive compensation held or available to be held. The information provided in this section was supplied by the management of the Company.

FINANCIAL STATEMENTS

The audited consolidated financial statements of the Company for the financial years ended October 31, 2019, together with the reports of the auditors thereon, will be placed before Shareholders at the Meeting for their consideration. No formal action will be taken at the Meeting to approve these financial statements. If any

shareholder has questions regarding such financial statements, such questions may be brought to management of the Company.

MATTERS TO BE ACTED UPON AT THE MEETING

MATTER #1 - NUMBER OF DIRECTORS

The constating documents of the Company provide that the Board shall consist of not less than three (3) and not more than twelve (12) directors. The Company currently has four (4) directors. At the Meeting, the shareholders will be asked to consider and approve a special resolution setting the number of directors of the Company at three (3) which is within the minimum and maximum number provided for in the constating documents of the Company. In order to be passed, this resolution must receive the affirmative vote of at least 66 2/3 % of the shareholders of the Company present or represented by proxy at the Meeting.

Shareholders are asked to pass the following special resolution setting the number of directors of the Company at three (3) (the “**Board Composition Resolution**”):

“**BE IT RESOLVED AS A SPECIAL RESOLUTION THAT:**

1. the number of directors of the Company is hereby set at three (3); and
2. any officer of the Company be and is hereby authorized for, and on behalf of the Company, to execute and deliver such documents and instruments and to take such other action as such officer may determine to be necessary or advisable to implement this resolution and the matters authorized hereby, such determination to be conclusively evidenced by the execution and delivery of any such documents or instruments and the taking of any such action.”

The Board recommends a vote “for” the approval of the resolution setting the number of directors of the Company at three (3). **Unless a proxy specifies that the common shares it represents are to be withheld from voting in favour of the Board Composition Resolution, the proxies named in the form of proxy intend to vote FOR the approval of the Board Composition Resolution.**

MATTER #2 - ELECTION OF DIRECTORS

The constating documents of the Company provide for a minimum of three directors and a maximum of twelve directors, as determined by the Board. The Company currently has four (4) directors with the term of each director expiring at the Meeting. The proposed number of directors to be elected at the Meeting is three (3). Management does not contemplate that any of the proposed nominees will be unable to serve as a director, but if that should occur for any reason prior to the Meeting, the common shares represented by properly executed proxies given in favour of such nominee(s) may be voted by the persons designated by management of the Company in the form of proxy, in their discretion, in favour of another nominee.

The following table states the names of the persons nominated by management for election as directors, their province/state of residency, current principal occupation, business or employment and the same for the previous five years unless disclosed in an information circular previously provided to shareholders, and the number of shares of the Company beneficially owned, directly, or indirectly, or over which control or direction is exercised, by each of them as of the Record Date. If elected, the term of office as director for each nominee will expire at the next annual shareholders’ meeting. The information as to shares beneficially owned or controlled has been furnished by each of the management nominees:

Name, Province/State of Residence and Director Since	Principal Occupation and Past Experience	Number of Voting Securities Beneficially Owned or Controlled
Joseph Fuda ⁽¹⁾ Ontario, Canada (February 2002)	Joseph Fuda is President, Chief Executive Officer and Director of the Company. Before leading Micromem, Mr. Fuda was involved in the investment banking industry and was a principal shareholder, director and Vice-President with EFI Capital, a Toronto-based financial services firm sold in 2003. EFI had offices across Canada and owned and operated insurance, brokerage and trust services.	1,624,335/0.42%
Oliver Nepomuceno ⁽²⁾ Lugano, Switzerland (June 2006)	Oliver Nepomuceno is an investment banker for Crystal Business SA., a Swiss investment company located in Lugano, Switzerland. Mr. Nepomuceno's principal responsibility is to manage commercial and investment businesses worldwide in several fields and industries. Under his direction, numerous companies have been able to improve their business and generate profitability worldwide. In addition to acting as an investment advisor, Mr. Nepomuceno oversees portfolio management for private clients. Mr. Nepomuceno previously served as a Director of Echo Energy Canada Inc, an Ontario based producer of natural gas.	1,078,572/0.28%
Alex Dey ⁽³⁾ Ontario, Canada (September, 2010)	Mr. Dey has been a Director of Micromem since 2010. He operated as Alex Dey, Chartered Accountant until August, 2004 at which point he retired from private practice. He continues to provide professional services to a number of small businesses.	899,800 ⁽⁴⁾ /0.23%

Notes:

⁽¹⁾ Member of the Audit Committee and Disclosure Committee.

⁽²⁾ Member of the Audit Committee and Compensation Committee.

⁽³⁾ Chair of the Audit Committee, Compensation Committee, and Disclosure Committee.

⁽⁴⁾ 254,863 of these common shares are indirectly held by a corporation; 123,427 are indirectly held by a family member of Alex Dey.

Cease Trade Orders and Bankruptcies

There are no cease trade orders or bankruptcies to report.

At the Meeting, Shareholders of the Company will be asked to elect to the Company's Board the three individuals nominated for election by management (namely, Joseph Fuda, Oliver Nepomuceno, and Alex Dey).

Unless authority to do so is withheld, the persons designated by management of the Company in the form of proxy intend to vote FOR the election as directors of the proposed nominees whose names are set forth above.

MATTER #3 - APPOINTMENT OF AUDITORS

Shareholders of the Company will be asked to approve the appointment of MNP LLP ("MNP") as the auditors of the Company to hold office until the close of the next annual meeting of the Shareholders of the Company and to authorize the Board to fix the remuneration to be paid to the auditors. The Board appointed MNP as auditors of the Company on November 30, 2017 following the resignation of the Company's previous auditors Collins Barrow Toronto LLP, known at that time as RSM Canada LLP ("RSM"). Enclosed as Schedule "C" hereto is a copy of the notice dated December 20, 2017 (the "Company's Notice") which was sent by the Company to MNP and RSM advising that RSM had resigned at Company's request, that there were no "disagreements", "consultations" or "unresolved issues" (all as defined in NI 51-102) between the Company and RSM, and requesting that MNP and RSM provide the necessary confirmations. Also included in Schedule "C" hereto are the replies of RSM and MNP confirming that they agree with the statements in the Company's Notice.

The Audit Committee of the Company meets on a regular basis and conducts periodic reviews of all professional services. After such review, the Audit Committee recommended to the Board the appointment of MNP LLP as the Company's independent auditors to hold office until the next annual meeting of shareholders.

The Board recommends a vote "for" the appointment of MNP as independent auditors for the Company until the next annual meeting of shareholders or until a successor is appointed and the authorization of the board of directors to fix the auditors' remuneration.

Unless authority to do so is withheld, the persons named in the form of proxy intend to vote FOR the appointment of MNP as the auditor of the Company until the close of the next annual meeting of the shareholders of the Company, or until its successor is appointed, and the authorization of the board of directors of the Company to fix the remuneration of the auditors of the Company.

MATTER #4 - AMENDMENTS TO THE STOCK OPTION PLAN

The current the stock option plan of the Company (the "2014 Plan") was approved by the Shareholders of the Company at a meeting held on January 30, 2015. Under the 2014 Plan, a maximum of 18,840,000 common shares were reserved for issuance to eligible persons.

At the Meeting, the shareholders of the Company will be asked to approve an increase of the number of common shares reserved for issuance to Eligible Persons (as that term is defined in the 2020 Plan) from 18,840,000 to 27,500,000, as well as a few administrative changes. All the material terms of the 2020 Plan are identical to those of the 2014 Plan; please refer to the heading below entitled "2014 Stock Option Plan" for a description of those terms.

The Board believes that it is beneficial for the Company to be able to issue additional stock options to Eligible Persons to increase the ability of the Company to attract, motivate and retain qualified individuals, as noted below:

- following the Meeting, the Company will have only three (3) directors. As the business of the Company progresses, management is actively preparing to add experienced board members, officers, employees or consultants, including engineering professionals. The ability to issue additional stock options will benefit negotiations;
- for sustainability, the following cost cutting measures have been put in place: (a) salaries for senior management were eliminated as of August 2017; (b) employees have not received an increase in salaries since February 2014; (c) salaries for employees were cut approximately 35% recently and the salaries are paid as part of the Government Wage Subsidy Program, relating to the COVID-19 emergency assistance; and (d) health benefits were cancelled in March 2015. The ability to issue additional stock options will help the Company to retain its directors, officers and employees; and
- in recent years, officers, directors and employees have funded the Company through equity and debt.

As of the date hereof, a total of 5,430,000 options for the purchase of up to 5,430,000 common shares have been granted and are outstanding under the 2014 Plan. A total of 13,410,000 options remain available to be granted under the 2014 Plan. Under the 2020 Plan, all options that have previously been granted shall remain outstanding on the terms ascribed thereto and subject to their original terms and conditions.

If approval is received for the 2020 Plan, a total of 27,500,000 options would be reserved for issuance under the 2020 Plan, including shares issuable pursuant to options previously granted and that are outstanding. Following approval of the 2020 Plan, the 2014 Plan will be discontinued and no option will be issued under that plan. All options that have been previously granted shall remain outstanding on the terms ascribed thereto and subject to their original terms and conditions. Shareholders should note that the new number of shares reserved for options under the 2020 Plan represents approximately 7.14% of the Company's current issued and outstanding common shares.

Shareholders are asked to pass the following ordinary resolution (meaning a resolution passed by the majority of votes cast in person or by proxy at the Meeting) authorizing the approval of the 2020 Plan:

"BE IT RESOLVED AS AN ORDINARY RESOLUTION THAT:

1. the Company is hereby authorized to amend and restate the "2014 Micromem Technologies Inc. Stock Option Plan" and to rename it the "2020 Micromem Technologies Inc. Stock Option Plan" (the "2020

Plan”), essentially in the form of the 2020 Plan attached hereto as Schedule “A”;

2. the number of shares that may be issued pursuant to options to be granted under the 2020 Plan is increased to 27,500,000 (including shares issuable pursuant to options previously granted and that are outstanding); and
3. any officer and/or director of the Company be and the same is hereby authorized and directed, for and in the name of and on behalf of the Company, to execute and deliver all such other agreements, amendments, instruments, certificates and other documents and to do all such other acts and things as such director and/or officer may determine to be necessary or advisable to carry out the foregoing resolution.”

In the absence of a contrary instruction, the persons designated by management of the Company in the form of proxy intend to vote FOR the amendments to the stock option plan, as set forth in the above resolutions approving the 2020 Plan.

MATTER #5 – AMENDMENTS TO BY-LAWS

At the Meeting, the Shareholders will be asked to ratify amendments to Company’s By-laws authorizing the Company to issue securities in book-entry form, and hold virtual and hybrid shareholder meetings.

On September 20, 2019, the Board approved the adoption of By-Law No. 1C (the “**First By-Laws Amendment**”), amending the by-laws of the Company, to allow the Company to issue securities in book-entry form. The First By-laws Amendment as approved by the Board reads as follows: “**Any security of the Corporation may be issued and held in a book-entry-only form or similar book-entry style system**”.

If the First By-Laws Amendment is approved at the Meeting, the Shareholders will be able to elect to hold their securities in the Company in book-entry form through the Direct Registration System (“**DRS**”) which is a service in which securities are owned, recorded and transferred electronically without issuing a physical security certificate. Instead of being represented by a physical security certificate, securities are held in registered form and recorded electronically on the books and records of the Company, maintained by its Transfer Agent. Any movement of book-entry securities into or out of a Shareholder’s DRS account is reported by a DRS Transaction Advice mailed within approximately three business days of the transaction. A physical certificate can be issued at Shareholder’s request. The Board believes that the First By-Laws Amendment is consistent with Shareholders’ rights, and benefits the Shareholders and the Company for the following reasons:

- Shareholders continue to enjoy all the traditional rights and privileges afforded to securityholders, including the right to receive notice and vote at annual and special meetings;
- Book-entry securities can be transferred without surrendering a physical security certificate;
- The Company will be able to conduct corporate actions without the administrative cost of certificates; and
- The DRS eliminates Shareholder’s risk of loss, theft or destruction of certificates, and the time and expense to replace them.

Effective July 23, 2020, the Board is adopting By-Law No. 1D (the “**Second By-Laws Amendment**” and together with the First By-Laws Amendment, the “**By-Laws Amendments**”) amending the By-laws of the Company, to allow the Company to organize virtual and hybrid shareholders meetings without relying on the temporary relief granted under the OBCA in connection with the COVID-19 pandemic. The Second By-Laws Amendment reads as follows: “**Meetings of shareholders of the Corporation may be held by electronic means as hybrid or virtual meetings as the board may determine from time to time. If a hybrid or virtual meeting is held by electronic means (including phone), a shareholder who, through those means, votes at the meeting or establishes a communications link to the meeting shall be deemed to be present at the meeting. A meeting of shareholders held by electronic means shall be deemed to be held at the place where the registered office of the Corporation is located.**”

If the Second By-Laws Amendment is approved by Shareholders, the Company will be able to organize virtual or hybrid meetings of Shareholders after the COVID-19 related temporary relief is lifted. In recent years, virtual and hybrid meetings of shareholders have become increasingly utilized by public companies with a large number of shareholders. A virtual shareholder meeting is held exclusively online replacing the traditional in-person meeting entirely. A hybrid meeting has an in-person physical location where shareholders may attend, while also permitting

shareholders to participate online remotely. In both formats, shareholders can submit questions and vote on matters in real time during meetings. The Board believes that the Second By-Laws Amendment benefits the Shareholders and the Company as follows:

- Shareholders can participate at a virtual or hybrid meeting from anywhere and therefore the attendance at the meeting can increase;
- A virtual meeting may reduce the Company's costs incurred in the traditional format, including venue rental and catering;
- The online format usually permits questions to be submitted by shareholders ahead of time, which allows the Board to consider them in advance and address them at the meeting more fully; and
- Shareholders may vote and ask questions at a virtual or hybrid meeting.

Pursuant to the provisions of the OBCA, the By-Laws Amendments will cease to be effective unless ratified and confirmed by a resolution passed by a simple majority of the votes cast by Shareholders at the Meeting. At the Meeting, Shareholders will be asked to consider, and if deemed advisable, approve a resolution ratifying the By-Laws Amendments, substantially in the following form:

“BE IT RESOLVED AS AN ORDINARY RESOLUTION THAT:

1. the By-Laws Amendments in the form presented in the Circular for the Meeting be and are hereby ratified and confirmed;
2. any officer and/or director of the Company be and the same is hereby authorized and directed, for and in the name of and on behalf of the Company, to execute and deliver all such other agreements, amendments, instruments, certificates and other documents and to do all such other acts and things as such director and/or officer may determine to be necessary or advisable to carry out the foregoing resolution.”

In the absence of a contrary instruction, the persons designated by management of the Company in the form of proxy intend to vote FOR the amendments to the by-laws of the Company, as set forth in the above resolutions approving the By-Law Amendments.

MATTER #6 – OTHER MATTERS COMING BEFORE THE MEETING

The Company knows of no other matters to be submitted to the shareholders at the Meeting. If any other matters properly come before the Meeting, it is the intention of the persons named in the form of proxy to vote the shares they represent in accordance with their judgement on such matters.

EXECUTIVE COMPENSATION

Compensation of Named Executive Officers and Directors

Pursuant to NI 51-102, the Company is required to disclose all compensation for services rendered to the Company for its two most recently completed financial years, in respect of (i) the Chief Executive Officer (“CEO”); (ii) the Chief Executive Officer (“CFO”); and (iii) any other executive officer whose compensation in any of those years exceeded \$150,000 (together, the “NEOs”), as well as all directors. The Company currently has two NEOs: Joseph Fuda, President and CEO, and Dan Amadori, CFO. The following tables and related notes disclose the information required to be disclosed under NI 51-102 (Form 51-102F6V). Unless otherwise stated, all amounts with respect to executive compensation are stated in United States dollars.

Compensation Excluding Compensation Securities

The following table sets out all compensation paid to NEOs and directors, other than stock options and other compensation securities, for each of the financial years ended October 31, 2019 and October 31, 2018.

Table of compensation excluding compensation securities							
Name and position ⁽¹⁾	Year	Salary, consulting fee, retainer or commission (\$)	Bonus (\$)	Committee or meeting fees (\$)	Value of perquisites (\$)	Value of all other compensation (\$)	Total compensation (\$)
Joseph Fuda, CEO and Director ⁽¹⁾	2019	\$4,682	Nil	Nil	Nil	Nil	\$4,682
	2018	Nil	Nil	Nil	Nil	Nil	Nil
Dan Amadori, CFO ⁽²⁾	2019	Nil	Nil	Nil	Nil	Nil	Nil
	2018	\$49,238	Nil	Nil	Nil	Nil	\$49,238
Steven Van Fleet, Business Development Manager, Director and President of MAST Inc. ⁽³⁾	2018	\$174,816	Nil	Nil	Nil	Nil	\$174,816
David Sharpless, Director ⁽⁴⁾	2018	Nil	Nil	Nil	Nil	Nil	Nil
Oliver Nepomuceno, Director	2019	Nil	Nil	Nil	Nil	Nil	Nil
	2018	Nil	Nil	Nil	Nil	Nil	Nil
Alex Dey, Director	2019	Nil	Nil	Nil	Nil	Nil	Nil
	2018	Nil	Nil	Nil	Nil	Nil	Nil
Brian Von Herzen, Director	2019	Nil	Nil	Nil	Nil	Nil	Nil
	2018	Nil	Nil	Nil	Nil	Nil	Nil

⁽¹⁾ The balance payable to Joseph Fuda at October 31, 2019 with respect to 2019 remuneration was nil.

⁽²⁾ The balance payable to Dan Amadori at October 31, 2019 with respect to 2019 remuneration was nil.

⁽³⁾ Steven Van Fleet resigned as a director and President of MAST, Inc. on August 17, 2018.

⁽⁴⁾ David Sharpless resigned as a director on March 23, 2018.

External Management Companies – Dan Amadori

Dan Amadori is engaged by the Company through his company, Lamerac Financial Corp., to provide management services on a month-to-month contract which stipulates an annual base amount of remuneration of CDN \$150,000 for his services. He is also entitled to an annual performance based bonus determined at the discretion of the Compensation Committee with the approval of the Board of Directors. There are no provisions for any additional payments upon termination. His remuneration in 2019 was nil.

Stock Options and Other Compensation Securities

No stock options or other compensation securities have been granted or issued to Directors and NEOs of the Company during the financial year ended on October 31, 2019.

Exercise of Compensation Securities by Directors and NEOs

There were no exercises of compensation securities by NEOs and Directors during the most recently completed financial year.

Employment, Consulting and Management Agreements

Joseph Fuda

Joseph Fuda was appointed as the Company's CEO on February 13, 2002. He has had a month-to-month contract since 2010, which stipulated an annual base amount of remuneration of CDN \$160,000 for his services. This base amount was increased to CDN \$256,000 in 2013. He is also entitled to an annual performance-based bonus determined at the discretion of the Compensation Committee. There are no provisions for any additional payments upon change of control, severance, termination or constructive dismissal. He received \$4,682 compensation in 2019.

Dan Amadori

Dan Amadori was appointed CFO of the Company on June 29, 2004. He is engaged by the Company through his company, Lamerac Financial Corp., to provide management services on a month-to-month contract which stipulates an annual base amount of remuneration of CDN \$150,000 for his services. He is also entitled to an annual

performance-based bonus determined at the discretion of the Compensation Committee. There are no provisions for any additional payments upon change of control, severance, termination or constructive dismissal. He received no compensation in 2019.

Oversight and Description of Directors and NEOs Compensation

The objective of the Company's executive compensation program is to attract qualified executives who can provide the leadership and management skills necessary to achieve the Company's business plan goals and build long-term shareholder value. The program is designed to reward its executives financially for achieving and surpassing annual operating performance targets through revenue growth and productivity improvement.

The Company's executive compensation program has two key elements:

1. *Base Compensation and Bonus* - The Company establishes a base compensation level unique to each executive that reflects the executive's business credentials, level and length of experience, past compensation history and existing levels of executive compensation. This ensures that the Company can attract experienced and qualified executives. The Company also pays bonuses to its executives that are tied to performance criteria and goals established from time to time. Specific performance criteria and goals, as well as the approximate weight assigned to each performance criterion or goal, are disclosed in this document as footnotes to the table of "Compensation Excluding Compensation Securities". Base compensation and bonuses are recommended by the Compensation Committee and approved by the Board of Directors.

2. *Corporate Share Ownership* - The stock option plan provides an opportunity for each executive to acquire equity in the Company. Ownership of common shares aligns the interests of executives with that of the shareholders and encourages them to focus on increasing shareholder value. Option grants are recommended by the Compensation Committee and approved by the Board of Directors.

The Company's Compensation Committee is composed of two members, Oliver Nepomuceno and Alex Dey, who are considered to be independent as neither of them holds any position with the Company other than that of director. The Compensation Committee is responsible for implementing and overseeing compensation, benefits and human resource policies to be approved by the Board of Directors. The Compensation Committee does not use peer groups to determine compensation. It reviews compensation from time to time and modifies each compensation element as required based on financial and operational performance, taking into consideration the Company's financial strength and the general economic climate.

Significant Events Affecting Compensation in the Most Recently Completed Financial Year

Compensation was virtually eliminated in 2019 as a cost cutting measure which was initiated by the CEO and CFO. Dan Amadori's compensation was nil in 2019. Joseph Fuda received \$4,682 of compensation in 2019.

2014 STOCK OPTION PLAN

The purpose of the Company's stock option plan, as amended and restated as of December 12, 2014 and approved by the shareholders on January 30, 2015 (the "**2014 Plan**") is to strengthen retention of key management employees, to align their interests with those of shareholders and to provide incentive compensation. The total number of shares that may be issued pursuant to options granted under the 2014 Plan is 18,840,000. As at October 31, 2019, there were a total of 5,730,000 options outstanding under the 2014 Plan entitling the holders to purchase 5,730,000 common shares representing 1.65% of the issued and outstanding common shares of the Company. At the same date, the number of options available for future issuance under the 2014 Plan was 13,110,000.

Under the 2014 Plan, the Board has the authority to determine, among other things, the persons to whom options are granted and the number of such options. At the time an option is granted, the Board also determines the exercise price of the option which is to be equal to the closing price of the common shares on such stock exchange or quotation system on which the common shares may be listed or quoted on the day immediately preceding the date of grant, subject to any applicable stock exchange or securities. Under the 2014 Plan, the Board also has the authority to determine any vesting criteria or other restrictions that apply to the exercisability of options granted under the 2014 Plan. The expiry date for options granted under the 2014 Plan can be any time up to ten years from the date of grant. Options granted will vest immediately on being granted, unless the Board determines otherwise. Options cannot be

transferred or assigned by a participant. Options that expire unexercised are available for subsequent option grants. Subject to any restrictions contained in the 2014 Plan, the Board may also impose such other terms and conditions, as it shall deem necessary or advisable at the time of grant.

Options expire under the 2014 Plan on the earliest of: (i) subject to any provision in the 2014 Plan to the contrary, on the day the option holder is no longer an Eligible Person, (ii) in the case of termination that is not for cause, the day that is forty-five (45) days following the date of termination (other than for just cause or by reason of death or disability), subject to the discretion of the Board of Directors to extend the expiry period (and any vesting within such period) to no more than ninety (90) days after termination, (iii) immediately upon termination by the Company or a subsidiary of employment for just cause, (iv) one year following the death of a participant for options vested as of the date of such participant's death, subject to the discretion of the Board of Directors to the vesting of the option during such period, or (v) the option termination date.

The Board of Directors of the Company, subject to any regulatory or required shareholder approval, has the power under the 2014 Plan to amend or terminate the 2014 Plan at any time, provided, however, that any such amendment or termination shall not materially adversely affect the rights of a participant.

The Company does not provide any financial assistance to participants under the 2014 Plan to facilitate the purchase of securities.

Stock Options Granted and Outstanding

During the financial year ended October 31, 2019, no options were granted or exercised under the 2014 Plan. During that period, a total of 520,000 options for 520,000 common shares expired or were cancelled. As of the Record Date, there are 5,430,000 options outstanding under the Option Plan.

The following table sets out information as at October 31, 2019 concerning securities authorized for issuance under the Company's 2014 Plan:

Stock Option Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)⁽¹⁾
Equity compensation plans approved by securityholders	5,730,000	\$0.25	13,110,000
Equity compensation plans not	Nil	Nil	Nil
Total	5,730,000	\$0.25	13,110,000

⁽¹⁾ Under the Stock Option Plan, a maximum of 18,840,000 common shares are reserved to be issued upon the exercise of options. At October 31, 2019, the Corporation had 346,952,721 common shares issued and outstanding.

INDEBTEDNESS OF DIRECTORS, EXECUTIVE OFFICERS AND EMPLOYEES

There was no aggregate indebtedness of any Executive Officers, Directors, employees and former Executive Officers, Directors and employees of the Company or any of its subsidiaries (i) to the Company or to any of its subsidiaries, or (ii) to another entity if the indebtedness is the subject of a guarantee, support agreement, letter of credit or other similar understanding provided by the Company or any of its subsidiaries.

COMPENSATION OF DIRECTORS

The amount and form of directors' compensation is reviewed periodically by the Board. The directors do not currently receive cash compensation from the Company for their participation on the Board or as a member of a committee. The Company does, from time to time, grant options to its directors to purchase common shares of the Company which options are granted pursuant to the Company's Stock Option Plan. Such options are offered to directors at prices that are equal to or above the market price for the common shares at the date that the options are granted. The Company granted nil stock options to directors in 2019 and 450,000 in 2018.

INTEREST OF INFORMED PERSONS IN MATERIAL TRANSACTIONS

Except as otherwise disclosed in this Circular, none of the informed persons (as that term is defined in NI 51-102) of the Company, no proposed nominee for election as a director of the Company and no associate or affiliate of such persons or proposed directors has any material interest, direct or indirect, in any transaction since the commencement of the Company's last completed financial year or in any proposed transaction, which, in either case, has materially affected or will materially affect the Company or any of its subsidiaries.

STATEMENT OF CORPORATE GOVERNANCE PRACTICES

National Instrument 58-101 – *Disclosure of Corporate Governance Practices* (“NI 58-101”) requires disclosure by each reporting issuer of its approach to corporate governance with reference to the guidelines, as it is recognized that the unique characteristics of individual corporations will result in varying degrees of compliance. National Policy 58-201 – *Corporate Governance Guidelines* has set out a series of guidelines for effective corporate governance. The guidelines address matters such as the constitution and independence of corporate boards, the function to be performed by boards and their committees and the effectiveness of their board members.

Board of Directors

The Board of the Company is responsible for the stewardship of the Company and for the supervision of management to protect shareholder interests. The Board oversees the development of the Company's strategic plan and the ability of management to continue to deliver on the corporate objectives. The independent directors, when necessary, hold in-camera sessions exclusive of non-independent directors and members of management which facilitates open and candid discussion amongst the independent directors and a degree of independent supervision over management.

NI 58-101 defines an “independent director” as a director who has no direct or indirect material relationship with the Company. A “material relationship” is defined as a relationship which, in the view of the Board, could be reasonably expected to interfere with the exercise of such member's independent judgment. Three out of the four current members of the Board are independent, namely Oliver Nepomuceno, Alex Dey, and Brian von Herz. Joseph Fuda is not independent as a result of being a member of the Company's management.

The Board of Directors has adopted a Governance Committee Charter. To date the tasks associated with the Governance Committee have been discharged by the Audit Committee.

Directorships

None of the members of the Board are directors of other reporting issuers.

Orientation and Continuing Education

The Company does not have an orientation and education program in place for new board members. The Board's continuing education is typically derived from correspondence with the Company's solicitors, auditors and other advisers to remain up to date in relevant corporate and securities' law matters. New board members will participate in such training and orientation as may be deemed by the Board to be necessary or appropriate in the circumstances.

Disclosure Committee

The Disclosure Committee is currently composed of two Directors: Alex Dey (Chair) and Joseph Fuda. This Committee works in concert with the CFO and is primarily responsible for ensuring compliance with the Company's disclosure policies as the same applies to all public disclosures and statements made by or about the Company. The Disclosure Committee works closely with the Audit Committee with respect to all financial disclosure made by the Company. The Disclosure Committee meets on an as required basis.

Compensation Committee

The Compensation Committee is currently composed of two Directors: Alex Dey (Chair) and Oliver Nepomuceno. The Committee ensures that the Company has a plan for continuity of its officers and an executive compensation plan that is competitive to retain executive management and other key personnel. The Committee also provides recommendations to the Board of Directors regarding the Company's Stock Option Plan. The Compensation Committee was formed by the Board of Directors on March 26, 2008. The Compensation Committee met as

required during 2017, 2018 and 2019. The Committee makes its recommendation pertaining to compensation based on competitive market rates that exist in similar industries and companies both private and public.

Nomination of Directors

The Company does not presently have a Nominations Committee. The Board, as a whole, reviews the size of the Board of Directors to ensure the facilitation of effective decision making. Where changes to the composition of the Board are deemed to be beneficial to the Board as a whole, the Board will collectively identify, put forward suitable candidates or consider nominees, if any, recommended by shareholders.

Committee Charters

The charter for the Audit Committee, Disclosure Committee, Compensation Committee and Governance Committee were included in the prior year's Information Circular and are unchanged as of the date hereof. The charter for the Audit Committee is included as Schedule "B" to this Information Circular. The charters are also disclosed on the Company's website.

Assessments

In view of the size and current state of the Company's development and the number of directors on the Board, the Board has not felt it necessary at the present time to adopt a formal process to assess Board, committee and individual director effectiveness. In view of the frequency of both formal and informal Board meetings during the course of the year there is ample opportunity for each director to assess the effectiveness of all other directors. The Company is not proposing to adopt a formal process for assessment at the present time.

Ethical Conduct

The Company ensures that all employees, executives and Board members conduct their actions in an ethical manner by enforcing the existing corporate governance policies and charters described herein. In the event there is a need to implement additional corporate governance policies the company will assess the need to enact the appropriate policy and oversee the implementation and enforcement of that policy.

Statement of Diversity

While the Company is a venture issuer and therefore is not be subject to the Ontario Securities Commission's proposed amendments to the disclosure requirements regarding the representation of women on the Board of Directors and in senior management, the Company is committed to providing an environment in which all employees and directors are treated with fairness and respect, and have equal access to opportunities for advancement based on skills and aptitude. Moreover, the Company intends to model this commitment by increasing its focus on diversity among the Board of Directors and within senior management of the Company. Building diversity will take time, particularly in view of the Company's current size and level of development. The candidates who will be considered will include male and female applicants with the requisite technical skills suitable to the Company's requirements.

AUDIT COMMITTEE

The text of the Audit Committee Charter is attached as Schedule "B" of this Circular. The Audit Committee is currently composed of three directors: Oliver Nepomuceno, Alex Dey (Chair), and Joseph Fuda. All three members of the Audit Committee are considered to be financially literate. As defined in National Instrument 52-110 – *Audit Committees* ("NI 52-110"), Messrs. Oliver Nepomuceno and Alex Dey are independent while Mr. Joseph Fuda is not an independent member of the Audit Committee because he is the Company's President and CEO.

Mr. Oliver Nepomuceno is an investment banker located in Switzerland and has participated in a variety of transactions in various global jurisdictions. He has acted on behalf of a number of private and public companies. Mr. Nepomuceno also serves on the Compensation Committee.

Mr. Alex Dey was previously the sole proprietor of Alex Dey, Chartered Accountant. He is currently President of a private company that provides accounting and tax services. Mr. Dey also serves on the Compensation and Disclosure Committees.

Mr. Joseph Fuda is President, CEO and Director of the Company. Before leading Micromem, Mr. Fuda was involved in the investment banking industry and was a principal shareholder, director and Vice-President with EFI Capital, a Toronto-based financial services firm sold in 2003. EFI had offices across Canada and owned and operated insurance, brokerage and trust services.

The Audit Committee acts on behalf of the Board in reviewing certain financial information prepared for public distribution, in monitoring internal accounting controls and in monitoring the business conduct of the Company. This Committee is also responsible for assuring that the Company's financial statements accurately portray the financial position of the Company and the results of its operations. It reviews other matters relating to the financial position of the Company and the results of its operations. As the Committee sees fit, it recommends the appointment, change or reappointment of the external auditor. It also reviews and approves the non-audit services provided by the external auditor. In doing so, the Audit Committee considers whether the provision of these non-audit services may impact the objectivity and independence of the external auditor.

Since the commencement of the issuer's most recent financial year, all recommendations of the Audit Committee to nominate or compensate an external auditor were adopted by the Board of Directors. The Audit Committee met formally on a quarterly basis in 2017, 2018 and 2019. It also met on an *ad hoc* basis as required.

The Audit Committee meets annually with the independent auditors to review the scope, proposed audit fees and related detail of the forthcoming annual year-end audit to be conducted by the independent auditors. The Audit Committee also reviews the extent of "non-audit" services and related fee proposals that may be requested from the independent auditors from time to time. In doing so, the Audit Committee considers whether the provision of these non-audit services may impact the objectivity and independence of the external auditor.

Pursuant to section 6.1 of NI 52-110, the Company is providing the disclosure required for venture issuers under Form 52-110F2:

Fees Paid to Auditors

The following sets out fees paid to MNP, Liptons and audit consultants for underlying derivative work in 2018 and 2019. All amounts given are in Canadian Dollars.

	<u>2019</u>	<u>2018</u>
Audit Fees:	\$96,300	\$104,185
Tax Fees:	\$ 0	\$ 0
All Other Fees:	<u>\$43,215</u>	<u>\$88,020</u>
Total:	<u>\$139,515</u>	<u>\$192,205</u>

The Audit Committee determined that the provision of the non-audit services (comprised of services provided to the Company in connection with the required securities filings) did not compromise the independence of MNP LLP.

Fees Paid to Professionals and Regulators

The following sets out fees paid to professionals and regulators, as costs for maintaining a public company in good standing. All amounts given are in CDN dollars.

	<u>2019</u>	<u>2018</u>
Transfer Agent (TSX Trust):	\$17,350	\$17,065
Regulatory Fees and Obligations (Filing Fees, PRs):	\$22,456	\$32,382
Listing Fees (CSE, OTC):	\$ 23,496	\$16,964
Legal Fees (Securities law):	<u>\$52,503</u>	<u>\$29,216</u>
Total:	<u>\$115,805</u>	<u>\$95,267</u>

In 2019, the cost to the Company to remain in good standing as a public company was \$255,320.

AUDITORS, TRANSFER AGENT AND REGISTRAR

The Company's current auditors are MNP LLP, 111 Richmond Street West, Suite 300, Toronto, ON M5H 2G4. TSX Trust Company has been appointed as the Company's registrar and transfer agent.

ADDITIONAL INFORMATION

Additional information relating to the Company is filed on SEDAR and can be accessed on the internet at www.sedar.com, as well as on the Company's website at <https://micromeminc.com>.

Financial information is provided in the Company's comparative financial statements and in its management discussion and analysis ("MD&A") for its most recently completed financial year. Shareholders may obtain copies of such financial statements and MD&A on SEDAR which can be accessed on the internet at www.sedar.com, or by mailing a request the Company to the attention of its Corporate Secretary, 121 Richmond Street West, Suite 304, Toronto, ON M5H 2K1 or by email to info@micromeminc.com.

APPROVAL OF THE BOARD OF DIRECTORS

The contents and the sending of this Circular have been approved by the Board of Directors of the Company.

DATED at Toronto, Ontario this 23rd day of July 2020.

MICROMEM TECHNOLOGIES INC.

Joseph Fuda (signed)
President, Chief Executive Officer, and Director

SCHEDULE "A"

MICROMEM TECHNOLOGIES INC.

2020 STOCK OPTION PLAN

1. PURPOSE OF THE PLAN

1.1 The purpose of the Plan is to attract, retain and motivate persons with the required training, experience and leadership as directors, officers, employees and key service providers of the Corporation and its Subsidiaries and to advance the interests of the Corporation by providing such persons with the opportunity, through share options, to acquire an increased proprietary interest in the Corporation.

2. DEFINED TERMS

Where used herein, the following terms shall have the following meanings, respectively:

2.1 "**2014 Stock Option Plan**" means the Stock Option Plan of the Corporation that was approved by shareholders on January 30, 2015;

2.2 "**Board**" shall mean the board of directors of the Corporation;

2.3 "**Corporation**" means Micromem Technologies Inc.;

2.4 "**Eligible Person**" means:

(i) any director, officer or employee of the Corporation or any Subsidiary, or any other Service Provider (an "**Eligible Individual**"); or

(ii) a corporation of which an Eligible Individual is an employee or shareholder (an "**Employee Corporation**");

2.5 "**Insider**" means any insider, as such term is defined in Subsection 1(1) of the *Securities Act* (Ontario), of the Corporation;

2.6 "**Market Price**" at any date in respect of the Shares means the closing sale price of the Shares on the Canadian Securities Exchange (or other stock exchange on which the Shares are listed and posted for trading from time to time as may be selected for such purpose by the Board) on the trading day immediately preceding such date. In the event that the Shares did not trade on such trading day, the Market Price shall be the average of the bid and ask prices in respect of the Shares at the close of trading on such trading day. In the event that the Shares are not listed and posted for trading on any stock exchange or quotation system, the Market Price shall be the fair market value of the Shares as determined by the Board in its sole discretion;

2.7 "**Option**" means an option to purchase Shares granted to an Eligible Person under the Plan;

2.8 "**Option Price**" means the price per Share at which Shares may be purchased under an Option, as the same may be adjusted from time to time in accordance with Article 8 hereof;

2.9 "**Optioned Shares**" means the Shares issuable pursuant to an exercise of Options;

2.10 "**Optionee**" means an Eligible Person to whom an Option has been granted and who continues to hold such Option;

2.11 "**Plan**" means this Stock Option Plan, as the same may be further amended or varied from time to time;

2.12 "**Service Provider**" means:

- (i) an employee or Insider of the Corporation or any Subsidiary; or
- (ii) any other person or company engaged to provide ongoing management or consulting services for the Corporation or for any entity controlled by the Corporation;

2.13 "Shares" means the common shares of the Corporation or, in the event of an adjustment contemplated by Article 8 hereof, such other shares or securities to which an Optionee may be entitled upon the exercise of an Option as a result of such adjustment; and

2.14 "Subsidiary" means any corporation which is a subsidiary, as such term is defined in Subsection 1(2) of the *Business Corporations Act* (Ontario), of the Corporation.

3. ADMINISTRATION OF THE PLAN

3.1 The Plan shall be administered by the Board.

3.2 The Board shall have the power, where consistent with the general purpose and intent of the Plan and subject to the specific provisions of the Plan:

- (a) to establish policies and to adopt rules and regulations for carrying out the purposes, provisions and administration of the Plan;
- (b) to interpret and construe the Plan and to determine all questions arising out of the Plan or any Option, and any such interpretation, construction or determination made by the Board shall be final, binding and conclusive for all purposes;
- (c) to determine the number of Shares covered by each Option;
- (d) to determine the Option Price of each Option;
- (e) to determine the time or times when Options will be granted and exercisable;
- (f) to determine if the Shares which are issuable on the exercise of an Option will be subject to any restrictions upon the exercise of such Option; and
- (g) to prescribe the form of the instruments relating to the grant, exercise and other terms of the Options.

3.3 The Board may, in its discretion, require as conditions to the grant or exercise of any Option that the Optionee shall have:

- (a) represented, warranted and agreed in form and substance satisfactory to the Corporation that he or she is acquiring and will acquire such Option and the Shares to be issued upon the exercise thereof or, as the case may be, is acquiring such Shares, for his or her own account, for investment and not with a view to or in connection with any distribution, that he or she has had access to such information as is necessary to enable him or her to evaluate the merits and risks of such investment and that he or she is able to bear the economic risk of holding such Shares for an indefinite period;
- (b) agreed to restrictions on transfer in form and substance satisfactory to the Corporation and to an endorsement on any option agreement or certificate representing the Shares making appropriate reference to such restrictions (including any notation required by any securities regulatory authority, stock exchange or trading facility having jurisdiction); and
- (c) agreed to indemnify the Corporation in connection with the foregoing.

3.4 Any Option granted under the Plan shall be subject to the requirement that, if at any time counsel to the Corporation shall determine that the listing, registration or qualification of the Shares subject to such Option upon any securities exchange or under any law or regulation of any jurisdiction, or the consent or approval of any

securities exchange or any governmental or regulatory body, is necessary as a condition of, or in connection with, the grant or exercise of such Option or the issuance or purchase of Shares thereunder, such Option may not be accepted or exercised in whole or in part unless such listing, registration, qualification, consent or approval shall have been effected or obtained on conditions acceptable to the Board. Nothing herein shall be deemed to require the Corporation to apply for or to obtain such listing, registration, qualification, consent or approval.

3.5 This Plan shall be read and interpreted consistently with all applicable laws, rules, regulations and policies of any securities regulatory authority, stock exchange or trading facility having jurisdiction and, to the extent of any inconsistency between the terms of this Plan and the provisions of such laws, rules, regulations and policies, the provisions of such laws, rules, regulations and policies shall prevail.

4. SHARES SUBJECT TO THE PLAN

Options may be granted in respect of authorized and unissued Shares, provided that the aggregate number of Shares reserved for issuance upon the exercise of all Options granted under the Plan, subject to any adjustment of such number pursuant to the provisions of Article 8 hereof, shall not exceed 27,500,000 or such greater number of Shares as may be determined by the Board and approved, if required, by the shareholders of the Corporation and by any relevant stock exchange or other regulatory authority (including shares issuable pursuant to options previously granted and that are outstanding under the 2014 Stock Option Plan). Optioned Shares in respect of which Options are not exercised shall be available for subsequent Options. No fractional Shares may be purchased or issued under the Plan.

5. ELIGIBILITY; GRANT; TERMS OF OPTIONS

5.1 Options may be granted to any Eligible Person in accordance with this Article 5; provided, however, that:

5.1.1. the maximum number of securities, calculated on a fully-diluted basis, reserved for issuance under the Plan to any one Eligible Person shall not exceed 5% of the Corporation's outstanding securities;

5.1.2. the maximum number of securities, calculated on a fully-diluted basis, that are issued within 12 months to Eligible Persons shall not exceed 10% of the Corporation's outstanding securities; and

5.1.3. the maximum number of securities, calculated on a fully-diluted basis, that are issued within 12 months to any one Eligible Person and such Eligible Person's associates (as that term is defined in National Instrument 45-106 *Prospectus Exemptions*) shall not exceed 5% of the Corporation's outstanding securities.

5.2 Options may be granted by the Corporation to the extent that they have been approved by the Board.

5.3 Subject as herein and otherwise specifically provided in this Article 5, the number of Shares subject to each Option, the Option Price of each Option, the expiration date of each Option, the extent to which each Option is exercisable from time to time during the term of the Option and other terms and conditions relating to each such Option shall be determined by the Board or a director or officer of the Corporation designated by the Board to make such determination.

5.4 Each Option granted under this Plan shall be exercisable for a maximum period of ten (10) years from the date the Option is granted to the Optionee. Subject to this section 5.4, the Board shall, at the time of granting an Option, determine the time or times when an Option or a part of an Option shall be exercisable.

5.5 Subject to any adjustments pursuant to the provisions of Article 8 hereof, the Option Price of any Option shall in no circumstances be lower than the Market Price on the date on which the grant of the Option is approved by the Board unless otherwise permitted under applicable laws, rules and regulations and the rules of any stock exchange or trading facility through which the Shares may be traded from time to time. If, as and when any Shares have been duly purchased and paid for under the terms of an Option, such Shares shall be conclusively deemed allotted and issued as fully paid non-assessable Shares at the price paid therefore.

5.6 An Option is personal to the Optionee and non-assignable (whether by operation of law or otherwise), except as provided for herein. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of an Option contrary to the provisions of the Plan, or upon the levy of any attachment or similar process upon an Option, the Option shall, at the election of the Corporation, cease and terminate and be of no further force or effect

whatsoever.

6. TERMINATION OF EMPLOYMENT, DEATH

6.1 Subject to Sections 6.2 and 6.3 hereof and to any express resolution passed by the Board with respect to an Option, an Option and all rights to purchase Shares pursuant thereto shall expire and terminate immediately upon the Optionee who holds such Option ceasing to be an Eligible Person.

6.2 If, before the expiry of an Option in accordance with the terms thereof, an Optionee shall cease to be an Eligible Person (an "Event of Termination") for any reason other than the termination for "cause" of his or her employment with the Corporation or any Subsidiary then the Optionee may:

(a) exercise the Option to the extent that he or she was entitled to do so at the time of such Event of Termination, at any time up to and including, but not after, the forty-fifth (45th) day after the date of such Event of Termination, or prior to the close of business on the expiration date of the Option, whichever is earlier; and

(b) with the prior written consent of the Board, which consent may be withheld arbitrarily in the Corporation's sole discretion, exercise any part of the Option which was not exercisable at the time of the occurrence of the Event of Termination, at any time up to and including, but not after, the ninetieth (90th) day after the date of such Event of Termination, or prior to the close of business on the expiration date of the Option, whichever is earlier, to purchase all or any of the Optioned Shares as the Board may designate but not exceeding the number of Optioned Shares the Optionee would have otherwise been entitled to purchase pursuant to the Option had the Optionee's status as an Eligible Person been maintained for the term of the Option.

6.3 If an Optionee dies before the expiry of an Option in accordance with the terms thereof, the Optionee's legal representative(s) may, subject to the terms of the Option and the Plan:

(a) exercise the Option to the extent that the Optionee was entitled to do so at the date of his or her death at any time up to and including, but not after, the date which is one year after the date of death of the Optionee, or prior to the close of business on the expiration date of the Option, whichever is earlier; and

(b) with the prior written consent of the Board, exercise at any time up to and including, but not after, the date which is one year after the date of death of the Optionee, or prior to the close of business on the expiration date of the Option, whichever is earlier, any part of the Option which was not exercisable at the time of the Optionee's death to purchase all or any of the Optioned Shares as the Board may designate but not exceeding the number of Optioned Shares the Optionee would have otherwise been entitled to purchase had the Optionee survived.

6.4 For greater certainty, Options shall not be affected by any change of employment of the Optionee or by the Optionee ceasing to be a director of the Corporation provided that the Optionee continues to be an Eligible Person.

6.5 For the purposes of this Article 6, a determination by the Corporation that an Optionee was discharged for "cause" shall be binding on the Optionee; provided, however, that such determination shall not be conclusive of the Optionee's potential entitlement to damages for the loss of the right to exercise an Option in the event that a court of competent jurisdiction ultimately determines that the discharge was without "cause".

6.6 If the Optionee is an Employee Corporation, the references to the Optionee in this Article 6 shall be deemed to refer to the Eligible Individual associated with the Employee Corporation.

6.7 If an Optionee has been terminated "for cause" or does not exercise his or her options in accordance with the provisions of sections 6.2 or 6.3 as the case may be, the number of options not exercised shall be added to the number of options remaining available to be granted under the Plan.

7. EXERCISE OF OPTIONS

7.1 Subject to the provisions of the Plan, an Option may be exercised from time to time by delivery to the Corporation at its registered office of a written notice of exercise addressed to the Secretary of the Corporation specifying the number of Shares with respect to which the Option is being exercised and accompanied by payment

in full, by cash or certified cheque, of the Option Price of the Shares then being purchased, plus applicable taxes, if any. Certificates for such Shares shall be issued and delivered to the Optionee within a reasonable time following the receipt of such notice and payment.

7.2 Notwithstanding any of the provisions contained in the Plan or in any Option, the Corporation's obligation to issue Shares to an Optionee pursuant to the exercise of any Option shall be subject to:

- (a) completion of such registration or other qualification of such Shares or obtaining approval of such governmental or regulatory authority as the Corporation shall determine to be necessary or advisable in connection with the authorization, issuance or sale thereof;
- (b) the admission of such Shares to listing on any stock exchange on which the Shares may then be listed;
- (c) the receipt from the Optionee of such representations, warranties, agreements and undertakings, as the Corporation determines to be necessary or advisable in order to safeguard against the violation of the securities laws of any jurisdiction; and
- (d) the satisfaction of any conditions on exercise prescribed pursuant to Section 3.4 hereof.

7.3 Options shall be evidenced by a share option agreement, instrument or certificate in such form not inconsistent with this plan as the Board may from time to time determine as provided for under Subsection 3.2 (g), provided that the substance of Article 5 be included therein.

8. CERTAIN ADJUSTMENTS

8.1 In the event of any subdivision or redivision of the Shares into a greater number of Shares at any time after the grant of an Option to any Optionee and prior to the expiration of the term of such Option, the Corporation shall deliver to such Optionee at the time of any subsequent exercise of his or her Option in accordance with the terms hereof, in lieu of the number of Shares to which he or she was theretofore entitled upon such exercise, but for the same aggregate consideration payable therefor, such number of Shares as such Optionee would have held as a result of such subdivision or redivision if, on the record date thereof, the Optionee had been the registered holder of the number of Shares to which he or she was theretofore entitled upon such exercise.

8.2 In the event of any consolidation of the Shares into a lesser number of Shares at any time after the grant of an Option to any Optionee and prior to the expiration of the term of such Option, the Corporation shall deliver to such Optionee at the time of any subsequent exercise of his or her Option in accordance with the terms hereof, in lieu of the number of Shares to which he or she was theretofore entitled upon such exercise, but for the same aggregate consideration payable therefor, such number of Shares as such Optionee would have held as a result of such consolidation if, on the record date thereof, the Optionee had been the registered holder of the number of Shares to which he or she was theretofore entitled upon such exercise.

8.3 If at any time after the grant of an Option to any Optionee and prior to the expiration of the term of such Option, the Shares shall be reclassified, reorganized or otherwise changed, otherwise than as specified in Sections 8.1 and 8.2 or, subject to the provisions of Subsection 9.2(a) hereof, the Corporation shall consolidate, merge or amalgamate with or into another corporation (the corporation resulting or continuing from such consolidation, merger or amalgamation being herein called the "Successor Corporation"), or the Corporation shall pay a stock dividend (other than any dividends in the ordinary course), the Optionee shall be entitled to receive upon the subsequent exercise of his or her Option in accordance with the terms hereof and shall accept in lieu of the number of Shares to which he or she was theretofore entitled upon such exercise but for the same aggregate consideration payable therefor, the aggregate number of shares of the appropriate class and/or other securities of the Corporation or the Successor Corporation (as the case may be) and/or other consideration from the Corporation or the Successor Corporation (as the case may be) that the Optionee would have been entitled to receive as a result of such reclassification, reorganization or other change or, subject to the provisions of Subsection 9.2(a) hereof, as a result of such consolidation, merger, amalgamation, or stock dividend, if on the record date of such reclassification, reorganization, other change or stock dividend, or the effective date of such consolidation, merger or amalgamation or dividend payment, as the case may be, he or she had been the registered holder of the number of Shares to which he or she was theretofore entitled upon such exercise.

8.4 In the event the Corporation should declare and pay a special cash dividend or other distribution out of the ordinary course, a special dividend in specie on the Shares, or a stock dividend other than in the ordinary course, the Option Price of all Options outstanding on the record date of such dividend or other distribution shall be reduced by an amount equal to the cash payment or other distribution or the fair market value of the dividend in specie or stock dividend or other distribution, as determined by the Board in its sole discretion. Any such reduction in the Option Price shall be subject to regulatory approval.

9. AMENDMENT OR DISCONTINUANCE OF THE PLAN

9.1 The Board may amend or discontinue the Plan at any time, provided, however, that no such amendment may materially and adversely affect any Option previously granted to an Optionee without the consent of the Optionee, except to the extent required by law. Any such amendment shall, if required, be subject to the prior approval of, or acceptance by, any stock exchange on which the Shares are listed and posted for trading. For greater certainty, the Board may, by resolution duly passed, amend this Plan to reduce the number of shares in respect of which options have not been granted at the date of such resolution and that are subject to this Plan, to meet the requirements of any stock exchange or regulatory authority.

9.2 Notwithstanding anything contained to the contrary in this Plan or in any resolution of the Board in implementation thereof:

(a) in the event the Corporation proposes to amalgamate, merge or consolidate with any other corporation (other than a wholly-owned Subsidiary) or to liquidate, dissolve or wind-up, or in the event an offer to purchase or repurchase the Shares of the Corporation or any part thereof shall be made to all or substantially all holders of Shares of the Corporation, the Corporation shall have the right, upon written notice thereof to each Optionee holding Options under the Plan, to permit the exercise of all such Options within the 20 day period next following the date of such notice and to determine that upon the expiration of such 20 day period, all rights of the Optionees to such Options or to exercise same (to the extent not theretofore exercised) shall *ipso facto* terminate and cease to have further force or effect whatsoever;

(b) in the event of the sale by the Corporation of all or substantially all of the assets of the Corporation as an entirety or substantially as an entirety so that the Corporation shall cease to operate as an active business, any outstanding Option may be exercised as to all or any part of the Optioned Shares in respect of which the Optionee would have been entitled to exercise the Option in accordance with the provisions of the Plan at the date of completion of any such sale at any time up to and including, but not after the earlier of: (i) the close of business on that date which is thirty (30) days following the date of completion of such sale; and (ii) the close of business on the expiration date of the Option; but the Optionee shall not be entitled to exercise the Option with respect to any other Optioned Shares;

(c) subject to the rules of any relevant stock exchange or other regulatory authority, the Board may, by resolution, advance the date on which any Option may be exercised or extend the expiration date of any Option. The Board shall not, in the event of any such advancement or extension, be under any obligation to advance or extend the date on or by which Options may be exercised by any other Optionee; and

(d) the Board may, by resolution, but subject to applicable regulatory requirements, decide that any of the provisions hereof concerning the effect of termination of the Optionee's employment shall not apply to any Optionee for any reason acceptable to the Board.

Notwithstanding the provisions of this Article 9, should changes be required to the Plan by any securities commission, stock exchange or other governmental or regulatory body of any jurisdiction to which the Plan or the Corporation now is or hereafter becomes subject, such changes shall be made to the Plan as are necessary to conform with such requirements and, if such changes are approved by the Board, the Plan as amended, shall be filed with the records of the Corporation and shall remain in full force and effect in its amended form as of and from the date of its adoption by the Board.

10. MISCELLANEOUS PROVISIONS

10.1 An Optionee shall not have any rights as a shareholder of the Corporation with respect to any of the Shares covered by such Option until the date of issuance of a certificate for Shares upon the exercise of such Option, in full or in part, and then only with respect to the Shares represented by such certificate or certificates. Without in any way limiting the generality of the foregoing, no adjustment shall be made for dividends or other rights for which the record date is prior to the date such share certificate is issued.

10.2 Nothing in the Plan or any Option shall confer upon an Optionee any right to continue or be re-elected as a director of the Corporation or any right to continue in the employ of the Corporation or any Subsidiary, or affect in any way the right of the Corporation or any Subsidiary to terminate his or her employment at any time; nor shall anything in the Plan or any Option be deemed or construed to constitute an agreement, or an expression of intent, on the part of the Corporation or any Subsidiary to extend the employment of any Optionee beyond the time which he or she would normally be retired pursuant to the provisions of any present or future retirement plan of the Corporation or any Subsidiary, or beyond the time at which he or she would otherwise be retired pursuant to the provisions of any contract of employment with the Corporation or any Subsidiary.

10.3 Notwithstanding Section 5.8 hereof, Options may be transferred or assigned between an Eligible Individual and the related Employee Corporation provided the assignor delivers notice to the Corporation prior to the assignment.

10.4 The Plan and all matters to which reference is made herein shall be governed by and interpreted in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein.

11. SHAREHOLDER AND REGULATORY APPROVAL

11.1 The Plan shall be subject to ratification by the shareholders of the Corporation to be effected by a resolution passed at a meeting of the shareholders of the Corporation, and to acceptance by any other relevant regulatory authority. Any Options granted prior to such ratification and acceptance shall be conditional upon such ratification and acceptance being given and no such Options may be exercised unless and until such ratification and acceptance are given.

DATED this 8th day of September 2020.

**SCHEDULE “B”
Audit Committee Charter**

**CHARTER OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS OF MICROMEM
TECHNOLOGIES INC.**

1. General

The primary focus of the Audit Committee (the “Committee”) is to assist the Board of Directors (the “Board”) in its general oversight of the Corporation’s financial reporting, internal control and audit functions. Management is responsible for the preparation, presentation and integrity of the Corporation’s financial statements, accounting and financial reporting principles, internal controls and procedures designed to assure compliance with accounting standards, applicable laws and regulations. The Corporation’s independent auditing firm is responsible for performing an independent audit of the consolidated financial statements in accordance with generally accepted auditing standards. The Committee serves a board level oversight role in which it provides advice, counsel and direction to management and the auditors on the basis of the information it receives, discussions with the auditors and the experience of the members in business, financial and accounting matters.

2. Organization

Committee members shall meet the requirements of the exchange(s) upon which the Corporation is listed as well as all governing regulatory bodies. The Committee shall comprise three or more Directors as determined by the Board of Directors, a majority of whom shall be independent non-management Directors, free from any relationship that would interfere with the exercise of his or her independent judgment. All members of the Committee shall be financially literate. The Committee members shall be appointed by the Board of Directors. The Board of Directors shall designate the Chairman of the Committee annually. The Corporation relies on certain exemptions from the requirement that all members of the audit committee be independent set forth in National Instrument 52-110 to the extent that one or more members of the audit committee are not independent.

3. Meetings

The Committee shall meet at least four times annually, or more frequently as circumstances dictate. At least one meeting (or more frequently as appropriate) should be with management and the independent auditors in separate executive sessions to discuss any matters that the Committee or any of these groups believe should be discussed privately. Meetings may be held in person in or by telephone conference. The Committee shall report on a regular basis its activities to the Board and shall make such recommendations to the Board as it deems appropriate.

4. Responsibilities And Processes

The primary responsibility of the Committee is to oversee the Corporation’s financial reporting process on behalf of the Board and report the results of its activities to the Board. The Committee should take the appropriate actions to set the overall corporate example for quality financial reporting, sound business risk practices and ethical behaviour. The Committee is not expected to audit the Corporation, to define the scope of the audit, to control the Corporation’s accounting practices, or define the standards to be used in preparing the Corporation’s financial statements. Corporation management is responsible for preparing the financial statements and the independent auditors are responsible for auditing those statements. The following shall be the principal recurring processes of the Committee in carrying out its oversight responsibilities. The processes are set forth as a guide with the understanding that the Committee may supplement or deviate from them as appropriate. The Committee shall:

- Evaluate, review and recommend to the Board the selection (or, where appropriate, replacement) of the Corporation’s independent auditors, subject to approval by the Corporation’s shareholders.
- Provide guidance to, and receive reports from, the Corporation’s independent auditors and financial management.

- Review the interim financial statements and earnings release (if any) with management, prior to releasing the same to the public. The Chairperson (or other Committee delegate) may represent the entire Committee for purposes of review with management and the independent auditors.
- Discuss the results of the annual audit and any other matters required to be communicated to the Committee by the independent auditors under generally accepted auditing standards.
- Review with management and the independent auditors the financial statements as required in Canadian jurisdictions where the Corporation is a reporting issuer and provide judgments about the quality, not just the acceptability, of accounting principles, the reasonableness of significant judgments and the clarity of the disclosure in the financial statements.
- Meet annually with the independent auditors to review the scope, proposed audit fees and related detail of the forthcoming annual year-end audit to be conducted by the independent auditors. Review the extent of “non-audit” services and related fee proposals that may be requested from the independent auditors from time to time.
- Discuss with management and the independent auditors the adequacy and effectiveness of the accounting and financial controls, including the Corporation’s system to monitor and manage business risk, as well as legal and ethical compliance programs.
- Evaluate the professional competency of the financial staff and the internal auditors, as well as the quality of their performance in discharging their respective responsibilities.
- Consult with management in an effort to resolve areas of questionable performance or deficiencies in structure or personnel.
- Discuss with the independent auditors the auditors’ independence from management and the Corporation.
- Review this Charter annually and recommend to the Board appropriate changes to it.

**SCHEDULE “C”
Change of Auditor Reporting Package**



Micromem Technologies Inc.
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Notice of Auditor Resignation and Auditor Appointment under National Instrument 51-102, ss. 4.11 (5) and (6)

To: Mark Jakovic, RSM Canada LLP (f/k/a Collins Barrow Toronto LLP)
And to: Will Avery, MNP LLP
From: Dan Amadori
Date: December 20, 2017
Re: Change of Auditor Notice

This notice is prepared and delivered in accordance with section 4.11 of National Instrument 51-102-*Continuous Disclosure Obligations* (“**NI 51-102**”). With respect to the change in audit firm for Micromem Technologies Inc. (“**Micromem**”) from Collins Barrow Toronto LLP (now known as RSM Canada LLP) to MNP LLP, we confirm that we have received a resignation of Collins Barrow Toronto LLP (now known as RSM Canada LLP), effective November 30, 2017, as auditors of Micromem. We note that Collins Barrow Toronto LLP resigned as auditors of Micromem at Micromem’s request.

In that regard, please note the following:

1. The termination of Collins Barrow Toronto LLP as auditor and appointment of MNP LLP have been considered and approved by the audit committee of Micromem’s board of directors, as well as by its board of directors.
2. The Collins Barrow Toronto LLP auditors’ report on Micromem’s financial statements relating to the periods ended October 31, 2016, 2015 and 2014 did not contain any modified opinion.
3. There are no reportable events (as defined in in connection with the service of Collins Barrow Toronto LLP as auditors of Micromem.

Pursuant to NI 51-102, RSM Canada LLP and MNP LLP are both requested to:

- a. Review this Notice; and
- b. Prepare and provide letters addressed to the Alberta Securities Commission, Manitoba Securities Commission and Ontario Securities Commission advising whether the firm agrees with the content of this Notice.

Given that the appointment of MNP LLP was recently approved by the audit committee of Micromem, we request that the letter from Collins Barrow Toronto to the regulators be submitted as soon as possible (and in any event within 7 days).

We thank you for your cooperation.

Sincerely,

A handwritten signature in black ink that reads "Dan Amadori".

Dan Amadori
CFO, Micromem Technologies Inc.
Phone: 416.644.4361
Cell: 416.456.6110
Email: dan.amadori@lamerac.com



RSM Canada LLP

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December 20, 2017

Alberta Securities Commission
Manitoba Securities Commission
Ontario Securities Commission

Dear Sirs/Mesdames:

**Re: Micromem Technologies Inc. (the "Corporation")
Notice of Change of Auditor**

We acknowledge receipt of a Notice of Change of Auditor (the "**Notice**") dated December 20, 2017 delivered to us by the Corporation in respect of the change of auditor of the Corporation.

Pursuant to National Instrument 51-102 of the Canadian Securities Administrators, please accept this letter as confirmation that we have reviewed the Notice and, based on our knowledge as at the time of receipt of the Notice, we agree with each of the statements therein.

Yours truly,

RSM Canada LLP

RSM Canada LLP

Chartered Professional Accountants
Licensed Public Accountants

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AUDIT | TAX | CONSULTING

December 20, 2017

Alberta Securities Commission
Manitoba Securities Commission
Ontario Securities Commission
U.S. Securities and Exchange Commission

Dear Sir/Madam:

Re: Notice of Change of Micromem Technologies Inc.

We have read the Notice of Micromem Technologies Inc. dated December 20, 2017 and are in agreement with the statements contained in such Notice, except that we have no basis to agree or disagree with the statement that there have been no reportable events and no disagreements between the Company and the Former Auditors.

Yours very truly,

A handwritten signature in black ink that reads 'MNP LLP'.

Chartered Professional Accountants
Licensed Public Accountants