FORM 51-102F3 NATIONAL INSTRUMENT 51-102 MATERIAL CHANGE REPORT UNDER SECTION 7.1 OF NI 51-102

FILED VIA SEDAR

Item 1. Name and Address of Company

Micromem Technologies Inc. 121 Richmond Street, Suite 304 Toronto, ON M5H 2K1

Item 2. Date of Material Change

A material change took place on August 21, 2013.

Item 3. News Release

On August 21, 2013, a news release in respect of the material change was released by Newsfile Corp.

Item 4. <u>Summary of Material Change</u>

The material change is fully described in the Company's press release which is attached as Schedule "A" and is incorporated herein.

Item 5. <u>Full Description of Material Change</u>

The company completed private placements totalling 1,374,435 common share units ("Units"), at a subscription price of CDN\$0.16 per Unit for gross proceeds of CDN\$219,909. Each Unit comprises one common share ("Common Share") and one warrant exercisable for one common share ("Warrant") at an exercise price, in the case of the Units issued in Canadian dollars, CDN\$0.21 for an exercise period of one year.

The Company raised CDN\$162,400 through the exercise of 1,306,667 Common Share Purchase Warrants ("Warrants") with strike prices of CDN\$0.12 and CDN\$0.15.

Minority shareholder approval and a formal valuation is not required as the transactions comprise less than 25% of the issuer's market capitalization.

Item 6. Reliance on Section 7.1(2) or (3) of National Instrument 51-102

The report is not being filed in reliance on section 7.1(2) or (3) of National Instrument 51-102.

Item 7. Omitted Information

No information has been omitted.

Item 8. Executive Officer

Joseph Fuda

Item 9. Date of Report

August 21, 2013

SCHEDULE "A"

FOR IMMEDIATE RELEASE

August 21, 2013

Micromem Technologies Inc. Completes Private Placements

Toronto, New York, August 21, 2013: Micromem Technologies Inc. (the "Company") (CNSX: MRM, OTCBB: MMTIF) announces the completion of private placements of a total of 1,374,435 common share units ("Units") at a subscription price of CDN\$0.16 per Unit for gross proceeds of CDN\$219,909. Each Unit comprises one common share ("Common Share") and one common share purchase warrant ("Warrant"). Each Warrant may be exercised for one Common Share at an exercise price of CDN\$0.21 for a period of one year.

The Company also announces 1,306,667 Common Shares were issued by the Company through a warrant exercise for total proceeds of CDN \$162,400. These Warrants were originally issued in connection with financings completed in 2012.

The proceeds from the offering will be used for general working capital purposes and the Common Shares and Warrants will be subject to resale restrictions.

About Micromem and MASTInc

MASTInc is a wholly owned U.S.-based subsidiary of Micromem Technologies Inc., a publicly traded (OTC BB: MMTIF, CNSX: MRM) company. MASTInc responsibly analyzes the specific industry sectors to create intelligent game-changing applications that address unmet market needs. By leveraging its expertise and experience with sophisticated magnetic sensor applications, MASTInc successfully powers the development and implementation of innovative solutions for healthcare/biomedical, natural resource exploration, government, information technology, manufacturing, and other industries. Visit www.mastinc.com.

Safe Harbor Statement

This press release contains forward-looking statements. Such forward-looking statements are subject to a number of risks, assumptions and uncertainties that could cause the Company's actual results to differ materially from those projected in such forward-looking statements. In particular, factors that could cause actual results to differ materially from those in forward looking statements include: our inability to obtain additional financing on acceptable terms; risk that our products and services will not gain widespread market acceptance; continued consumer adoption of digital technology; inability to compete with others who provide comparable products; the failure of our technology; the infringement of our technology with proprietary rights of third parties; inability to respond to consumer and technological demands; inability to replace significant customers; seasonal nature of our business; and other risks detailed in our filings with the Securities and Exchange Commission. Forward-looking statements speak only as of the date made and are not guarantees of future performance. We undertake no obligation to publicly update or revise any forward-looking statements. When used in this document, the words "believe," "expect," "anticipate," "estimate," "project," "plan," "should," "intend," "may," "will," "would," "potential," and similar expressions may be used to identify forward-looking statements.

The CNSX or any other securities regulatory authority has not reviewed and does not accept responsibility for the adequacy or accuracy of this press release that has been prepared by management.

Listing: NASD OTC-Bulletin Board - Symbol: MMTIF

CNSX - Symbol: MRM

Shares issued: 151,336,892 SEC File No: 0-26005

Investor Contact: info@micromeminc.com; Tel. 416-364-2023

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