



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

November 8, 2010

Mr. Dan Amadori
Chief Financial Officer
Micromem Technologies Inc.
777 Bay Street, Suite 1910
Toronto, Ontario M5G 2E4, Canada

**Re: Micromem Technologies Inc.
Form 20-F for the Fiscal Year Ended October 31, 2009
Filed March 1, 2010
File No. 000-26005
Amendment No. 3 to Registration Statement on Form F-3
Filed March 29, 2007
File No. 333-134309**

Dear Mr. Amadori:

We have reviewed your letter received October 14, 2010 in connection with the above-referenced filings and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments. Unless otherwise noted, where prior comments are referred to they refer to our letter dated August 23, 2010.

Amendment No. 3 to Registration Statement on Form F-3

General

1. We note your correspondence dated September 20, 2010 requesting the withdrawal of your registration statement on Form F-3. However, the correspondence you filed does not meet the requirements of Rule 477 of the Securities Act of 1933. Accordingly, please file a new withdrawal request on Form RW and ensure that the content of the request complies with the requirements of Rule 477.

Form 20-F for the Fiscal Year Ended October 31, 2009

Item 15. Controls and Procedures

Disclosure Controls and Procedures, page 43

2. We note that your response to prior comment 5 does not clearly indicate management's conclusions regarding whether your disclosure controls and procedures were effective or were not effective. As previously requested in prior comment 5, please amend your Form 20-F to revise your disclosure to state, in clear and unqualified language, the conclusions reached by your Chief Executive Officer and Chief Financial Officer on the effectiveness of your disclosure controls and procedures (i.e. you should disclose that your disclosure controls and procedures were "effective" or "not effective"). Please note that your conclusions should not be modified by using terms such as "fully," "except as discussed below," or "in this one area."

Management's Annual Report on Internal Control Over Financial Reporting, page 43

3. We note that your response to prior comment 7 does not clearly indicate management's conclusions regarding whether your internal control over financial reporting was effective or was not effective. As previously requested in prior comment 7, please amend and revise your disclosure to state, in clear and unqualified language, the conclusions reached by your Chief Executive Officer and Chief Financial Officer on the effectiveness of your internal control over financial reporting (i.e. you should disclose that your internal control over financial reporting was "effective" or "not effective"). Please note that your conclusions should not be modified by using terms such as "fully," "except as discussed below," or "in this one area."
4. You note in your response to prior comment 8 that management identified three material weaknesses in fiscal 2008 and one material weakness in fiscal 2009. Yet, on page 10, you indicate that such weaknesses were identified by the company's auditors. Please review and revise your disclosure where appropriate to ensure that disclosure regarding the identification of material weaknesses is clearly and consistently conveyed throughout your Form 20-F. In this regard, clarify that the company (instead of the auditors) first identified the material weaknesses, if accurate and as suggested by your response, and revise disclosure that suggests otherwise.
5. We note your response to prior comment 8. It remains unclear to us from the information provided how you concluded that the material weakness identified in fiscal 2008 relating to the company's procedures to effect the timely and complete close of its year-end financial statements did not remain a material weakness in fiscal 2009. Your response states that the 2009 material weakness related to the measurement of "the non-cash Black Scholes cost associated with warrants issued as part of [your] private placements," is unrelated to the material weakness identified in 2008 for failure to effect a timely and

complete year-end close. However, we note that your Form 20-F for the fiscal year ended October 31, 2008 indicates on page 55 that “revisions related to the application of the Black Scholes option pricing model” were one example of the material weakness relating to procedures for effecting a timely and complete year-end close for 2008.

In your response, given the apparent similarity of the material weaknesses identified in 2008 and 2009 with respect to effecting a timely and complete year-end close, please provide a more detailed explanation of how you concluded that the weaknesses identified above were distinct, rather than determining that a previously identified material weakness in internal controls had not been fully remedied. Please also review and revise your disclosure as appropriate to ensure that you consistently and accurately describe the nature of any identified material weakness and the status of its remediation.

Item 16F. Change in Registrants Certifying Accountant, page 48

6. We note your responses to prior comments 9 and 10. As previously requested:
 - Please amend and revise to state whether Schwartz Levitsky Feldman LLP resigned, declined to stand for re-election or was dismissed. Refer to Item 16F(a)(1)(i) of Form 20-F.
 - Please amend and revise to also state whether there were any reportable events, as defined in Item 16F(a)(1)(v)(A) through (D) of Form 20-F, through June 30, 2009, the subsequent interim period. In the event of a reportable event(s), provide the specific disclosures required by Item 16F(a)(1)(iv) of Regulation S-B.
7. To the extent that you make changes to your disclosures to comply with our comments, please obtain and file an updated letter from the former accountants stating whether the accountants agree with the statements made in your revised disclosures.

Item 19. Exhibits

8. We note your response to prior comment 13, indicating that the agreements described in paragraphs 7, 8, 10 and 11 on page 38 were entered into in the ordinary course of business and are not material to the company’s business. Yet, we note that such agreements were described pursuant to Item 10.C of Form 20-F, which requires disclosure of “each material contract, other than contracts entered into in the ordinary course of business, to which the company or any member of the group is a party, for the two years immediately preceding publication of the document.” Accordingly, please advise how you apparently determined that such agreements were material for purposes of Item 10 of Form 20-F, but were not material for purposes of Item 19 of Form 20-F. In addition, notwithstanding the ordinary course nature of the contracts, if you determine that any such contract is material, please provide us with your analysis as to whether the company is substantially dependent on such contract. If so, please file the agreement as

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an exhibit to your annual report on Form 20-F. Refer to Instruction 4(b)(ii) to Item 19 of Form 20-F.

You may contact Jaime John, Staff Accountant, at (202) 551- 3446 or Christine Davis, Assistant Chief Accountant, at (202) 551-3408 if you have questions regarding comments on the financial statements and related matters. Please contact Courtney Haseley, Staff Attorney, at (202) 551- 3548 or Katherine Wray, Staff Attorney, at (202) 551-3483 with any other questions. Please contact me at (202) 551-3406 with any other questions.

Sincerely,

Patrick Gilmore
Accounting Branch Chief