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

FORM 12b-25

NOTIFICATION OF LATE FILING

SEC FILE NUMBER: 0-22175

CUSIP NUMBER: 290846104

(Check One) ☐ Form 10-K ☐ Form 20-F ☐ Form 11-K ☒ Form 10-Q ☐ Form N-SAR ☐ Form N-CSR

For Period Ended: June 30, 2009

- ☐ Transition Report on Form 10-K
☐ Transition Report on Form 20-F
☐ Transition Report on Form 11-K
☐ Transition Report on Form 10-Q
☐ Transition Report on Form N-SAR

For the Transition Period Ended: _____

If the notification relates to a portion of the filing checked above, identify the Item(s) to which the notification relates: Not applicable

PART I - REGISTRANT INFORMATION

Full Name of Registrant:

EMCORE Corporation

Former Name if Applicable:

Not applicable

Address of Principal Executive Office (Street and Number):

10420 Research Road, SE

City, State and Zip Code:

Albuquerque, NM 87123

PART II - RULES 12b-25(b) AND (c)

If the subject report could not be filed without unreasonable effort or expense and the registrant seeks relief pursuant to Rule 12b-25(b), the following should be completed. (Check box if appropriate) ☒

(a) The reasons described in reasonable detail in Part III of this form could not be eliminated without unreasonable effort or expense;

(b) The subject annual report, semi-annual report, transition report on Form 10-K, Form 20-F, Form 11-K, Form N-SAR or Form N-CSR, or portion thereof, will be filed on or before the fifteenth calendar day following the prescribed due date; or the subject quarterly report of transition report on Form 10-Q, or portion thereof will be filed on or before the fifth calendar day following the prescribed due date; and

(c) The accountant's statement or other exhibit required by Rule 12b-25(c) has been attached if applicable.

PART III - NARRATIVE

State below in reasonable detail the reasons why Forms 10-K, 20-F, 11-K, 10-Q, N-SAR, N-CSR, or the transition report portion thereof, could not be filed within the prescribed time period.

EMCORE Corporation (the “Company”) is evaluating its long-lived assets for impairment in accordance with the Financial Accounting Standards Board’s Statement of Financial Accounting Standard No. 144, “*Accounting for the Impairment of Long-Lived Assets and Long-Lived Assets to be Disposed Of*”. The determination as to whether a write-down of long-lived assets is necessary involves significant judgment based on the short-term and long-term projections of the future performance of the reporting unit to which the long-lived assets are attributed.

As a result of the time necessary to complete this evaluation, the Company was unable to complete the filing of its Form 10-Q for the fiscal quarter ended June 30, 2009 by the due date of August 10, 2009, without unreasonable effort or expense. The Company believes that it will be able to file its Form 10-Q for the fiscal quarter ended June 30, 2009 within the five-day period provided under Rule 12b-25(b)(2)(ii).

PART IV - OTHER INFORMATION

- (1) Name and telephone number of person to contact in regard to this notification

John M. Markovich
(Name)

(505)
(Area Code)

332-5000
(Telephone Number)

- (2) Have all other periodic reports required under Section 13 or 15(d) of the Securities Exchange Act of 1934 or Section 30 of the Investment Company Act of 1940 during the preceding 12 months or for such shorter period that the registrant was required to file such report(s) been filed? If answer is no, identify report(s). ☒ Yes ☐ No

- (3) Is it anticipated that any significant change in results of operations from the corresponding period for the last fiscal year will be reflected by the earnings statements to be included in the subject report or portion thereof? ☒ Yes ☐ No

If so, attach an explanation of the anticipated change, both narratively and quantitatively, and, if appropriate, state the reasons why a reasonable estimate of the results cannot be made.

During the three months ended June 30, 2009, the Company continued to experience significant adverse changes in its results of operations (in particular, revenue, gross margin, operating loss, and net loss) when compared to the corresponding periods for the last fiscal year primarily due to adverse changes in the macroeconomic environment. During the three months ended June 30, 2009, the Company incurred approximately \$37 million of additional non-cash expenses related to impairment of long-lived assets in its Fiber Optics business segment, primarily related to the Company’s acquisition of Intel Corporation’s fiber optics assets in 2008, and other non-cash charges. The Company expects to report a fiscal 2009 third quarter net loss of approximately \$45 million.

This notification of late filing on Form 12b-25 contains forward-looking statements regarding the Company’s expectations concerning the filing of its Quarterly Report on Form 10-Q for its fiscal quarter ended June 30, 2009. These forward-looking statements are based on the Company’s current expectations and are subject to risks and uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof, and the Company undertakes no obligation to update these forward-looking statements to reflect subsequent events or circumstances.

EMCORE Corporation
(Name of Registrant as Specified in Charter)

has caused this notification to be signed on its behalf by the undersigned hereunto duly authorized.

Date: **August 11, 2009**

By: **/s/John M. Markovich**
Name: John M. Markovich
Title: Chief Financial Officer

ATTENTION
Intentional misstatements or omissions of fact constitute Federal Criminal Violations (See 18 U.S.C. 1001).