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

FORM 12b-25

NOTIFICATION OF LATE FILING

SEC FILE NUMBER: 001-36632

CUSIP NUMBER: 290846203

(Check one):

o Form 10-K

o Form 20-F

o Form 11-K

x Form 10-Q

o Form 10-D

...,.

o Form N-SAR

For Period Ended:

o Form N-CSR

D 1 04 00

December 31, 2014

o Transition Report on Form 10-K

o Transition Report on Form 20-F

o Transition Report on Form 11-K o Transition Report on Form 10-Q

o Transition Report on Form N-SAR

For the Transition Period Ended:

Read Instructions (on back page) Before Preparing Form. Please Print or Type.

Nothing in this form shall be construed to imply that the Commission has verified any information contained herein.

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

EMCORE Corporation

Full Name of Registrant

Not applicable

Former Name if Applicable

2015 Chestnut Street

Address of Principal Executive Office (Street and Number)

Alhambra, CA 91803

City, State and Zip Code

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 reason 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 or transition report on Form 10-Q or subject distribution report on Form 10-D, 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 why Forms 10-K, 20-F, 11-K, 10-Q, 10-D, N-SAR, N-CSR, or the transition report or portion thereof, could not be filed within the prescribed time period.

EMCORE Corporation (the "Company") will be unable to file its Quarterly Report on Form 10-Q for the quarterly period ended December 31, 2014 (the "Form 10-Q") prior to the filing deadline of February 9, 2015 because the Company needs additional time to complete its financial statement closing process. On September 17, 2014, we entered into an asset purchase agreement with Photon Acquisition Corporation, a Delaware corporation and an affiliate of private equity firm Veritas Capital ("Veritas"), pursuant to which Veritas agreed to acquire substantially all of the assets, and assume substantially all of the liabilities, primarily related to or used in our photovoltaics business (the "Photovoltaics Sale"). On October 22, 2014, we entered into an Asset Purchase Agreement with NeoPhotonics Corporation, a Delaware corporation ("NeoPhotonics"), pursuant to which we agreed to sell certain assets and transfer certain liabilities of our telecommunications business to NeoPhotonics (the "Telecom Sale" and, together with the Photovoltaics Sale, the "Asset Sales"). After the approval of our shareholders at a special meeting held on December 5, 2014 in Pasadena, California, the Photovoltaics Sale was consummated on December 10, 2014. Then, on January 2, 2015, the Telecom Sale was consummated.

Since that time, we have worked diligently with Veritas and Neophotonics to finalize the sales by working closely with their respective personnel to transfer the sold assets and liabilities, support customer service and shipping during the transition, and update the Company's financial statements to present the discontinued operations of the two businesses. The additional time dedicated to completion of the Asset Sales and the added

financial reporting requirements have extended the amount of time normally necessary to complete quarter-end activities, and prepare our Quarterly Report on Form 10-Q.

This delay could not be cured without unreasonable effort or expense. The Company believes that it will be able to file its Form 10-Q for the fiscal quarter ended December 31, 2014 within the five-day period provided under Rule 12b-25(b)(2)(ii).

| PART IV — | OTHER INF | ORMATION |
|-----------|-----------|----------|
|-----------|-----------|----------|

| (1) | Name and telephone number of person to contact in regard to this notification | | | | |
|-----|---|--|--------------------|--|--|
| | Mark Weinswig | (626) | 293-3400 | | |
| | (Name) | (Area Code) | (Telephone Number) | | |
| (2) | | odic reports required under Section 13 or 15(d) of the Securities Exchange Act of 1934 or Section 30 of the Investment Company Act preceding 12 months or for such shorter period that the registrant was required to file such report(s) been filed? If answer is 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?

x Yes o No

x Yes o 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.

As indicated above, we consummated the Photovoltaics Sale on December 10, 2014 and the Telecom Sale on January 2, 2015. As a consequence, the information contained in our Quarterly Report on Form 10-Q for the fiscal quarter ended December 31, 2014 will reflect changes from the corresponding period for the last fiscal year related to the consummation of the Asset Sales. We direct you to our Current Report on Form 8-K/A, and the financial statements attached as exhibits thereto, filed with the Securities and Exchange Commission on January 8, 2015, for relevant financial information concerning the Telecom Sale. We also direct you to our Current Report on Form 8-K/A and the financial statements attached as exhibits thereto, filed with the Securities and Exchange Commission on December 16, 2014, for relevant financial information concerning the Photovoltaics Sale.

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 December 31, 2014. 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 February 9, 2015 By /s/ Mark Weinswig

Name: Mark Weinswig Title: Chief Financial Officer

INSTRUCTION: The form may be signed by an executive officer of the registrant or by any other duly authorized representative. The name and title of the person signing the form shall be typed or printed beneath the signature. If the statement is signed on behalf of the registrant by an authorized representative (other than an executive officer), evidence of the representative's authority to sign on behalf of the registrant shall be filed with the form.

ATTENTION

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