

May 18, 2009

VIA FACSIMILE AND EDGAR

Division of Corporate Finance
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Attention: Celia Soehner

Re: EMCORE Corporation
Post-Effective Amendment on Form S-3 to the Registration Statement on Form S-1
File No. 333-149860

Dear Ms. Soehner:

Pursuant to Rule 477 under the Securities Act of 1933, as amended (the “Act”), EMCORE Corporation (the “Company”) respectfully requests that the Securities and Exchange Commission consent to the withdrawal of its Post-Effective Amendment on Form S-3 filed by the Company on February 25, 2009 (the “Post-Effective Amendment”) to amend the Registration Statement on Form S-1 (Registration Statement No. 333-149860) (the “Registration Statement”). The Company requests this withdrawal because the Company’s contractual obligations to maintain the effectiveness of the Registration Statement have lapsed and the Company no longer wishes to amend the Registration Statement. The Post-Effective Amendment was never declared effective and no securities were sold in connection with the Post Effective Amendment.

Please provide the Company a facsimile copy of the order consenting to the withdrawal of the Registration Statement as soon as it is available. The facsimile number of the Company is (505) 323-3402, and the facsimile number of our counsel, Tobias Knapp of Jenner & Block is (212) 909-0820. If you have any questions regarding this request for withdrawal, please contact Mr. Knapp at (212) 891-1655.

Sincerely,

EMCORE Corporation

By: /s/ Keith Kosco
Keith Kosco, Esq.
Chief Legal Officer and Secretary

cc: Tobias L. Knapp - Jenner & Block