CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER

Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Solely for the purposes of complying with 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, we the undersigned Chief Executive Officer and Chief Financial Officer of NPS Pharmaceuticals, Inc. certify that the Quarterly Report of NPS Pharmaceuticals, Inc. on Form 10-Q for the quarter ended March 31, 2010 fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects, the financial condition and results of operations of NPS Pharmaceuticals, Inc.

Date: May 5, 2010 /s/ François Nader

Francois Nader

President and Chief Executive Officer

Date: May 5, 2010 /s/ Luke M. Beshar

Luke M. Beshar

Senior Vice President and Chief Financial Officer

The foregoing certification is being furnished solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code) and is not being filed as part of the Form 10-Q or as a separate disclosure document.

A signed original of this written statement required by Section 906 has been provided to NPS Pharmaceuticals, Inc. and will be retained by NPS Pharmaceuticals, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.