

June 21, 2011

Mr. Kevin L. Vaughn
Accounting Branch Chief
Division of Corporation Finance
United States Securities and Exchange Commission
Mail Stop 3030
100 F Street, N.E.
Washington, D.C. 20549

RE: A. O. Smith Corporation
Form 10-K for the year ended December 31, 2010 filed February 24, 2011
File No. 1-475

Dear Mr. Vaughn:

This letter sets forth the responses of A. O. Smith Corporation (our "Company") to the letter of the Securities and Exchange Commission (the "Staff") dated June 9, 2011, with respect to our Company's Annual Report on Form 10-K for the year ended December 31, 2010 (the "Form 10-K"). To facilitate your review, our responses below include the Staff's original comments.

Form 10-K for the year ended December 31, 2010

Liquidity and Capital Resources, page 19

1. We note from your disclosures that your increase in working capital is partly attributable to higher cash levels outside of the United States. Additionally we note from your disclosures on page 51 that you have not recorded U.S. deferred income taxes on \$408.8 million on your foreign subsidiaries' undistributed earnings. It appears as though a portion of your cash balances will not be available for use in the U.S. unless they are repatriated into the U.S. To the extent a significant portion of your cash and cash equivalent balances will not be available in the U.S., please revise your future filings to quantify the amount of cash and cash equivalents that are currently held by your foreign subsidiaries. Refer to Item 303(a)(1) of Regulation S-K and Section IV of SEC Release 33-8350.

Company Response:

To the extent a significant portion of our cash and cash equivalent balances will not be available in the U.S. unless they are repatriated into the U.S., we will quantify in our future filings the amount of cash and cash equivalents that are currently held by our foreign subsidiaries.

Aggregate Contractual Obligations, page 19

2. Please revise future filings to disclose your payments under pension and post-retirement plans in your tabular disclosures. If the amounts and future timing are indeterminable, please include an explanatory footnote. Refer to Item 303(A)(5) of Regulation S-K.

Company Response:

In our future filings we will disclose estimates of our mandatory/required contributions to and payments under pension and post-retirement plans in our tabular disclosures of aggregate contractual obligations, or if the amounts and future timing are indeterminable, we will provide an explanatory footnote.

Our Company acknowledges as follows: it is responsible for the adequacy and accuracy of the disclosure in the Annual Report on Form 10-K for the year ended December 31, 2010; Staff comments or changes to disclosures in response to Staff comments do not foreclose the Commission from taking any action with respect to the Annual Report on Form 10-K for the year ended December 31, 2010; and our Company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities law of the United States.

Please direct any questions or comments regarding the foregoing responses to the undersigned at (414) 359-4056.

Very truly yours,

/s/ John J. Kita

John J. Kita

Executive Vice President and Chief Financial Officer

A. O. Smith Corporation

cc: Mr. Eric Atallah, Staff Accountant

Ms. Lynn Dicker, Senior Reviewing Accountant

Mr. Paul W. Jones, A. O. Smith Corporation Chairman and Chief Executive Officer

Mr. James F. Stern, A. O. Smith Corporation Executive Vice President, General Counsel and Secretary