



DIVISION OF  
CORPORATION FINANCE  
Mail Stop 7010

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

July 18, 2008

via U.S. mail

Richard E. Chandler, Jr.  
Senior Vice President, General Counsel and Corporate Secretary  
Smith International, Inc.  
16740 East Hardy Road  
Houston, Texas 77032

**Re: Smith International, Inc.**  
**Form S-4**  
**Filed June 24 2008 and amended June 25, 2008**  
**File No. 333-151897**

**Form 10-K**  
**Filed February 29, 2008**  
**File No. 1-08514**

**Schedule 14A**  
**Filed April 11, 2008**  
**File No. 1-08514**

Dear Mr. Chandler:

We have reviewed your response letter and the amended filing and have the following comments. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form S-4

Risk Factors, page 7

1. We note your response to prior comment number 2. Please update the risk factors in your Form S-4 to correspond with the sample language provided in your response letter.

Form 10-K for the Fiscal Year Ended December 31, 2007

Financial Statements

Revenue recognition policy, page 35

2. We note your response to prior comment number 4 with respect to your compliance with Regulation S-X, Rule 5-03(b)(1) and (2). Please clarify why you believe that you are not required to implement the appropriate operational or administrative modifications which would enable you to accumulate the necessary information in order to comply with this disclosure requirement. As part of your response, please explain whether it is impracticable to separate your components of revenue and cost of sales because of system limitations or because you are unable to separate bundled elements in multiple element arrangements under the applicable revenue recognition guidance.
3. We note the example you have provided in response to comment number 4 which indicates your sales arrangements routinely have separate elements for products and installation, inspection and repair/maintenance services. Please clarify how you apply the guidance of EITF 00-21 and FTB 90-1 to allocate revenue to the separate elements of your multiple element arrangements for recognition purposes.
4. We note from your disclosure that you also generate revenue from rentals. Please clarify the significant terms of your rental arrangements and whether such revenues are bundled as a separate element in your multiple element arrangements. If so, please explain how you apply EITF 00-21 to allocate revenue to your rental revenue. In addition, explain whether these rentals are considered leases in the scope of SFAS 13.
5. We note your response to prior comment number 5 with regard to your determination that M-1 SWACO, Smith Technologies and Smith Services units qualify for aggregation under the guidance included in paragraph 17 of SFAS 131. Please clarify how you have evaluated the differences in the gross margin of

the operating segments when determining that you have met the aggregation criteria of SFAS 131. In addition, please explain how you have evaluated other economic characteristics such as sales growth, return on assets employed and operating cash flows when determining that these segments have similar economic characteristics. We refer you to Question 8 in the FASB SFAS 131 Q&A which states that gross margin is used in this guidance only as an example.

#### Closing Comments

As appropriate, please amend your filings and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filings or in response to our comments on your filings.

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You may contact Sandy Eisen at (202) 551-3864 or Chris White at (202) 551-3461 if you have questions regarding comments on the financial statements and related matters. Please contact John Madison at (202) 551-3296 or Timothy Levenberg at (202) 551-3707 with any other questions.

Sincerely,

H. Roger Schwall  
Assistant Director

Cc: S. Eisen  
C. White  
J. Madison

Via facsimile  
David Shapiro  
(212) 403-2000