FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB AF	PROVAL
OMB Number:	3235-028

	G .	OMB APPROVAL			
Check this box if no longer subject to Section 16. Form 4 or Form 5 abligations may continue. See Instruction 1(b).	STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP	OMB Number:	3235-0287		
	OTAL EMERT OF OTTAKOLO IN BENEFICIAL OWNERORM	Estimated average burd			
	Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934	hours per response:	0.5		
	or Section 30(h) of the Investment Company Act of 1940				

1. Name and Address of Reporting Person*  COLE MICHAEL J  (Last) (First) (Middle)  A. O. SMITH CORPORATION  11270 WEST PARK PLACE  (Street)  MILWAUKEE WI 53224							2. Issuer Name and Ticker or Trading Symbol SMITH A O CORP [ AOS ]  3. Date of Earliest Transaction (Month/Day/Year) 10/12/2004  4. If Amendment, Date of Original Filed (Month/Day/Year)									5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  Director  Officer (give title Other (specify below)  Vice President - Asia  6. Individual or Joint/Group Filing (Check Applicable Line)  X Form filed by One Reporting Person  Form filed by More than One Reporting					
(City)	(Sta	te) (Z	ip)												Person						
Table I - Non-Deriv  1. Title of Security (Instr. 3)  2. Trans Date (Month/					action				3. Transa Code (	3. 4. Sec Transaction Code (Instr. 5)			ed of, or Benefic Securities Acquired (A) posed Of (D) (Instr. 3, 4			nt of s ally following	Form	: Direct Indirect Istr. 4)	7. Nature of Indirect Beneficial Ownership		
									Code	v	Amount	(A) or (D) Pr		rice	Reported Transact (Instr. 3 a	ion(s)			(Instr. 4)		
Common Stock 10/12						2/2004		A		4,200			(1)	13,242		D					
		Ta									osed of, onvertib				Owned						
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deem Execution if any (Month/Da	n Date,	4. Transaction Code (Instr. 8)		of		6. Date Exercis. Expiration Date (Month/Day/Yea		е	Amoun Securiti Underly Derivati	7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Numbe derivative Securities Beneficia Owned Following Reported Transacti (Instr. 4)	e s Illy	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)		
					Code	v	(A)	(D)	Date Exercisal		Expiration Date	Title	or Nu of	nount mber ares							
Employee Stock Options (Right to Buy) <sup>(2)</sup>	\$24.64	10/12/2004			A		5,500		10/11/20	05	10/12/2014	Commo Stock	<sup>n</sup> 5,	500	\$0	130,62	25	D			
Stock Appreciation Rights <sup>(2)</sup>	\$24.64	10/12/2004			A		5,500		10/11/20	05	10/12/2014	Commo Stock	<sup>n</sup> 5,	500	\$0	130,62	25	D			

## **Explanation of Responses:**

- 1. Award of restricted stock.
- 2. The employee stock options and stock appreciation rights were granted in tandem on 10/12/2004 under the A. O. Smith Combined Executive Incentive Compensation Plan, a transaction exempt under Rule 16b-3. Accordingly, the exercise of one results in the expiration of the other.

## Remarks:

W. David Romoser, Attorneyin-Fact for Michael J. Cole

10/13/2004

\*\* Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- $^{\star}$  If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.