U	NITED STATES	
SECURITIES AN	ND EXCHANGE CO	OMMISSION
	Washington, D.C. 20549	
	FORM 8-K	
	CURRENT REPORT	
Pursuant to Section 13	or 15(d) of the Securities Exch	ange Act of 1934
Date of Report	(Date of earliest event reported): April	1, 2005
Appl	ied Materials, In	<b>c.</b>
(Exact na	me of registrant as specified in its charter	)
Delaware (State or other jurisdiction of incorporation)	0-6920 (Commission File Number)	94-1655526 (IRS Employer Identification No.)
3050 Bowers Avenue		

P.O. Box 58039

Santa Clara, CA 95052-8039

(Address of principal executive offices)

(Zip Code)

Registrant s telephone number, including area code: (408) 727-5555

N/A
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- " Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- " Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- " Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- " Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

#### Item 5.04. Temporary Suspension of Trading under Registrant s Employee Benefit Plans.

On March 18, 2005, Applied Materials, Inc. (Applied) notified participants in the Applied Materials, Inc. Employee Savings and Retirement Plan (the 401(k) Plan) that a blackout period under the 401(k) Plan would be in effect beginning as of the close of the market on April 18, 2005, and ending during the week of April 24, 2005 (the 401(k) blackout period).

The notice to 401(k) Plan participants provided that the Applied Materials, Inc. Common Stock Fund (the Applied Stock Fund ) under the 401(k) Plan would be converting to real-time trading for purchases and sales and that the reason for the 401(k) blackout period was to allow sufficient time for the 401(k) Plan s trustee/recordkeeper to make this conversion to real-time trading. 401(k) Plan participants were advised to contact Fidelity Investments at 1-800-835-5098 to obtain the specific ending date of the 401(k) blackout period. During the 401(k) blackout period, participants will be unable to exchange their 401(k) Plan account balances into or out of the Applied Stock Fund, change their future contributions directed to the Applied Stock Fund, or request new loans or distributions from the Applied Stock Fund.

In addition to the notice to 401(k) Plan participants, on April 1, 2005, Applied gave written notice to all members of its Board of Directors and all executive officers pursuant to Section 306(a)(1) of the Sarbanes-Oxley Act of 2002 and SEC Regulation BTR promulgated thereunder. The notice advised that Applied s directors and executive officers are subject to special trading restrictions that, in general, prevent them from selling, purchasing or otherwise acquiring any shares of Applied common stock during the 401(k) blackout period, subject to certain exceptions. A copy of this notice is attached hereto as Exhibit 99.1.

During the 401(k) blackout period and for a period of two years after the ending date of the 401(k) blackout period, security holders or other interested persons may obtain, without charge, information about the actual beginning and ending dates of the 401(k) blackout period by contacting Charmaine Mesina, Managing Director, Corporate Legal Services, in writing, at Applied Materials, Inc., 3050 Bowers Avenue, P.O. Box 58039, M/S 2062, Santa Clara, CA 95052-8039.

### Item 9.01. Financial Statements and Exhibits.

(c) Exhibits

Exhibit No.	Description
99.1	Important Notice of Special Trading Restriction During 401(k) Blackout Period.

### **SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Applied Materials, Inc.

(Registrant)

Date: April 1, 2005

By: /s/ Joseph J. Sweeney
Joseph J. Sweeney

Group Vice President

Legal Affairs and Intellectual Property

and Corporate Secretary

## EXHIBIT INDEX

Exhibit No.	Description
00 1	Important Natice of Special Trading Restriction During 401(k) Blackout Period