SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 8-K

CURRENT REPORT PURSUANT TO SECTIONS 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported) August 30, 2006

ENTEGRIS, INC.

(Exact name of registrant as Specified in its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

000-30789 (Commission File Number)

41-1941551 (I.R.S. Employer Identification No.)

3500 Lyman Boulevard, Chaska, MN (Address of principal executive offices)

55318 (*Zip Code*)

(952) 556-3131

(Registrant's telephone number, including area code)

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 1.01. Entry into Material Definitive Agreement

On August 30, 2006 registrant entered into two accelerated share buyback agreements with Goldman Sachs & Co. providing for the repurchase of an aggregate of approximately \$100 million of registrant's common stock. The first agreement, which covers half of the accelerated repurchase amount, includes collar provisions that establish the minimum and maximum numbers of shares. The second agreement, which covers the balance of the accelerated repurchase amount, includes purchase price adjustment provisions. The specific number of shares to be repurchased, and the total purchase price, is generally based on the volume weighted average share price of the Company's common shares during the six- to twelve-month term of the accelerated repurchase agreements.

Item 7.01. Regulation FD Disclosure

On August 31, 2006, the registrant issued a press release to announce that its Board of Directors had authorized the repurchase of up to \$150 million of the registrant's outstanding common stock over the next 12-18 months in open market purchases and/or privately negotiated transactions. In addition the registrant's press release announced that registrant had entered into two accelerated share buyback agreements to immediately repurchase approximately \$100 million of its common stock. A copy of this press release is attached hereto as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

In accordance with General Instructions B.2 of Form 8-K, the information in this Item 7.01, including the exhibit, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall such information be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such a filing. The information set forth herein will not be deemed an admission as to the materiality of any information required to be disclosed solely to satisfy the requirements of Regulation FD.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Dated: August 31, 2006

Exhibit 99.1 Press Release, Dated August 31, 2006

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 thereunto duly authorized.

ENTEGRIS, INC.

By: /s/ John Villas

John Villas,

Senior Vice President & Chief Financial Officer

Entegris Announces \$150 Million Share Repurchase

The Company to Immediately Repurchase \$100 Million of its Shares in Accelerated Buyback

CHASKA (Minneapolis), Minn., August 31, 2006 – Entegris, Inc. (Nasdaq: ENTG) today announced that its Board of Directors had authorized the repurchase of up to \$150 million of the Company's common stock over the next 12 to 18 months. In connection with this share repurchase program, the Company has entered into two accelerated share buyback agreements with Goldman, Sachs & Co. to immediately repurchase an aggregate of approximately \$100 million of its common stock. Entegris is a global leader in purifying, protecting and transporting critical materials semiconductor and other industries use in manufacturing.

Based on Entegris' current stock price, the \$150 million share repurchase authorization represents approximately 10 percent of the Company's total market capitalization.

"The share repurchase underscores our confidence in the strength of the business model that we have created at Entegris and our commitment to our shareholders. Our strong balance sheet and ongoing cash flow provides us with the flexibility to continue to invest in our current business, to take advantage of acquisitions and other strategic opportunities, and to repurchase our shares," said Gideon Argov, president and chief executive officer of Entegris.

The accelerated portion of the share repurchase is comprised of two agreements under which Entegris will immediately pay Goldman Sachs \$100 million and will receive a substantial majority of the shares to be delivered under the agreements within four weeks. The first agreement, which covers half of the accelerated repurchase amount, includes collar provisions that establish the minimum and maximum numbers of shares. The second agreement, which covers the balance of the accelerated repurchase amount, includes purchase price adjustment provisions. The specific number of shares to be repurchased, and the total purchase price, is generally based on the volume weighted average share price of the Company's common shares during the six- to twelve-month term of the accelerated repurchase agreements. All of the repurchased shares will be retired.

Upon completion of the accelerated share buyback, Entegris intends to repurchase the balance of the \$150 million share repurchase authorization from time to time in open market transactions or in privately negotiated transactions in accordance with applicable federal securities laws, which may include repurchase plans under SEC Rule 10b5-1. The timing and amount of the repurchases will be determined by the Company's management based on their evaluation of market conditions, share price and other factors. The share repurchase program may be suspended or discontinued at any time.

As of July 1, 2006, Entegris had cash, cash equivalents and short-term investments of approximately \$311 million and 140 million shares outstanding.

Forward-Looking Statements

Certain information contained in this press release includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on current management expectations only as of the date of this press release, which involve substantial risks and uncertainties that could cause actual results to differ materially from the results expressed in, or implied by, these forward-looking statements. Statements which are modified by words such as "anticipate," "believe," "estimate," "expect," "forecast," "may," "will," "should" or the negative thereof and similar expressions as they relate to Entegris or our management are intended to identify such forward-looking statements. These statements are not guarantees of future performance and involve risks, uncertainties and assumptions which are difficult to predict. These risks include, but are not limited to, fluctuations in the market price of Entegris' stock, future operating results of Entegris, other acquisition and investment opportunities available to Entegris, general business and market conditions and other factors. Additional information concerning these and other risk factors may be found in previous financial press releases issued by Entegris and Entegris's periodic public filings with the Securities and Exchange Commission, including the discussion described under the headings "Risks Relating to our Business and Industry," and "Risks Related to Securities Markets and Ownership of Our Securities" in Item 7 of our Annual Report on Form 10–K for the fiscal year ended August 27, 2005. Except as required under the federal securities laws and the rules and regulations of the Securities and Exchange Commission, we undertake no obligation to update publicly any forward-looking statements contained herein.

ABOUT ENTEGRIS

Entegris (merged with Mykrolis in August 2005) is the global leader in materials integrity management, delivering a wide range of products for purifying, protecting and transporting critical materials used in processing and manufacturing in semiconductor and other high tech industries. Entegris is ISO 9001 certified and has manufacturing, customer service and/or research facilities in the United States, China, France, Germany, Japan, Malaysia, Singapore, South Korea and Taiwan. Additional information can be found at www.entegris.com.

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