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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For Quarter Ended February 26, 2005

Commission File Number 000-30789

ENTEGRIS, INC.
(Exact name of registrant as specified in charter)

Minnesota	**41-1941551**
(State or other jurisdiction of incorporation)	**(IRS Employer ID No.)**

3500 Lyman Boulevard, Chaska, Minnesota 55318
(Address of Principal Executive Offices)

Registrant's Telephone Number (952) 556-3131

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES ☒ NO ☐

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Exchange Act). YES ☒ NO ☐

APPLICABLE ONLY TO CORPORATE ISSUERS:

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the close of the latest practicable date.

Class	**Outstanding at March 31, 2005**
Common Stock, $0.01 Par Value	73,983,002

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ENTEGRIS, INC. AND SUBSIDIARIES
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Item 1. Financial Statements

ENTEGRIS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(Dollars in thousands, except per share data)
(Unaudited)

	February 26, 2005	August 28, 2004
ASSETS		
Current assets		
Cash and cash equivalents	$ 42,429	$ 42,309
Short-term investments	106,817	90,871
Marketable equity securities	4,833	—
Trade accounts receivable, net of allowance for doubtful accounts of $1,850 and $1,790	65,878	69,735
Trade accounts receivable due from affiliate	—	4,790
Inventories	42,930	45,186
Deferred tax assets	8,145	8,178
Other current assets	4,041	3,546
Total current assets	275,073	264,615
Property, plant and equipment, net of accumulated depreciation of $187,950 and $184,686	95,036	97,634
Other assets		
Investments	2,515	7,146
Intangible assets, net of amortization	23,168	24,876
Goodwill	70,212	70,164
Other	2,534	2,611
Total assets	$ 468,538	$467,046
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities		
Current maturities of long-term debt	$ 1,536	$ 1,492
Short-term borrowings	5,323	6,477
Accounts payable	12,520	15,768
Accrued liabilities	30,659	35,578
Income taxes payable	2,341	5,604
Total current liabilities	52,379	64,919
Long-term debt, less current maturities	20,246	18,898
Deferred tax liabilities	11,052	11,044
Contingent liabilities		
Shareholders' equity		
Common stock, $0.01 par value; 200,000,000 authorized; issued and outstanding shares: 73,944,311 and 73,379,777	739	734
Additional paid-in capital	156,497	152,869
Deferred compensation expense	(3,526)	(1,586)
Retained earnings	226,080	216,963
Accumulated other comprehensive income	5,071	3,205
Total shareholders' equity	384,861	372,185
Total liabilities and shareholders' equity	$ 468,538	$467,046

See accompanying notes to consolidated financial statements.

ENTEGRIS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(Amounts in thousands, except per share data)
(Unaudited)

	Three Months Ended		Six Months Ended	
	February 26, 2005	February 28, 2004	February 26, 2005	February 28, 2004
Sales to non-affiliates	$ 77,473	$ 72,367	$ 160,987	$ 136,089
Sales to affiliates	7,591	7,603	14,691	12,557
Net sales	85,064	79,970	175,678	148,646
Cost of sales	50,279	45,338	103,884	86,485
Gross profit	34,785	34,632	71,794	62,161
Selling, general and administrative expenses	24,442	23,345	48,977	44,389
Engineering, research and development expenses	4,389	4,821	9,089	9,424
Operating income	5,954	6,466	13,728	8,348
Interest income, net	(295)	(64)	(636)	(106)
Other (income) expense, net	(28)	(656)	366	(1,213)
Income before income taxes and other items below	6,277	7,186	13,998	9,667
Income tax expense	1,728	2,170	3,699	3,011
Equity in net loss (income) of affiliates	74	(7)	85	(4)
Net income	$ 4,475	$ 5,023	$ 10,214	$ 6,660
Earnings per common share:				
Basic	$ 0.06	$ 0.07	$ 0.14	$ 0.09
Diluted	$ 0.06	$ 0.07	$ 0.14	$ 0.09
Weighted shares outstanding:				
Basic	73,347	72,844	73,304	72,710
Diluted	75,429	76,629	75,247	76,248

ENTEGRIS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(Amounts in thousands)
(Unaudited)

Six months ended February 26, 2005	Common shares outstanding	Common stock	Additional paid-in capital	Deferred compensation expense	Retained earnings	Accumulated other comprehensive income (loss)	Total	Comprehensive income (loss)
Balance at August 28, 2004	73,380	$ 734	$152,869	$ (1,586)	$216,963	$ 3,205	$372,185	
Shares issued pursuant to stock option plans	150	1	643	—	—	—	644	
Shares issued pursuant to employee stock purchase plan	91	1	767	—	—	—	768	
Deferred compensation related to restricted stock awards	547	5	2,949	(2,954)	—	—	—	
Compensation earned in connection with restricted stock awards	—	—	—	1,014	—	—	1,014	
Repurchase and retirement of shares	(224)	(2)	(731)	—	(1,097)	—	(1,830)	
Foreign currency translation adjustment	—	—	—	—	—	1,870	1,870	$ 1,870
Net unrealized loss on marketable securities	—	—	—	—	—	(4)	(4)	(4)
Net income	—	—	—	—	10,214	—	10,214	10,214
Total comprehensive income								$ 12,080
Balance at February 26, 2005	73,944	$ 739	$156,497	$ (3,526)	$226,080	$ 5,071	$384,861	

Six months ended February 28, 2004	Common shares outstanding	Common stock	Additional paid-in capital	Deferred compensation expense	Retained earnings	Accumulated other comprehensive income (loss)	Total	Comprehensive income (loss)
Balance at August 30, 2003	72,512	$ 725	$142,540	$ —	$192,207	$ 2,193	$337,665	
Shares issued pursuant to stock option plans	402	4	2,288	—	(15)	—	2,277	
Shares issued pursuant to employee stock purchase plan	73	1	793	—	—	—	794	
Deferred compensation related to restricted stock awards	—	—	2,748	(2,748)	—	—	—	
Compensation earned in connection with restricted stock awards	—	—	—	488	—	—	488	
Foreign currency translation adjustment	—	—	—	—	—	1,616	1,616	$ 1,616
Net unrealized loss on marketable securities	—	—	—	—	—	(543)	(543)	(543)
Reclassification adjustment for gain on sales of equity investments included in earnings	—	—	—	—	—	(566)	(566)	(566)
Net income	—	—	—	—	6,660	—	6,660	6,660
Total comprehensive income								$ 7,167
Balance at February 28, 2004	72,987	$ 730	$148,369	$ (2,260)	$198,852	$ 2,700	$348,391	

See the accompanying notes to consolidated financial statements.

ENTEGRIS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Dollars in thousands)
(Unaudited)

	Six months ended	
	February 26, 2005	February 28, 2004
OPERATING ACTIVITIES		
Net income	$ 10,214	$ 6,660
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	11,556	13,072
Deferred compensation expense	1,014	488
Disposal of property and equipment	294	243
Gain on sale of equity investment	—	(1,072)
Provision for doubtful accounts	59	(77)
Provision for deferred income taxes	87	—
Equity in net loss (income) of affiliates	85	(4)
Gain on sale of property and equipment	(217)	(464)
Changes in operating assets and liabilities:		
Trade accounts receivable	5,093	(8,210)
Trade accounts receivable due from affiliate	4,790	(878)
Inventories	2,754	(5,230)
Accounts payable and accrued liabilities	(9,167)	5,259
Other current assets	(407)	(879)
Income taxes payable and refundable income taxes	(3,314)	6,969
Other	144	100
Net cash provided by operating activities	22,985	15,977
INVESTING ACTIVITIES		
Acquisition of property and equipment	(7,139)	(9,552)
Acquisition of businesses, net of cash acquired	(454)	—
Purchases of intangible assets	(322)	(369)
Proceeds from sale of equity investment	—	2,007
Proceeds from sales of property and equipment	2,016	1,498
Purchases of short-term investments	(55,288)	(41,294)
Maturities of short-term investments	39,178	30,350
Other	—	(21)
Net cash used in investing activities	(22,009)	(17,381)
FINANCING ACTIVITIES		
Principal payments on short-term borrowings and long-term debt	(9,133)	(9,471)
Proceeds from short-term borrowings and long-term debt	8,365	3,670
Repurchase of common stock	(1,830)	—
Issuance of common stock	1,413	3,071
Net cash used in financing activities	(1,185)	(2,730)
Effect of exchange rate changes on cash and cash equivalents	329	410
(Increase) in cash and cash equivalents	120	(3,724)
Cash and cash equivalents at beginning of period	42,309	52,746
Cash and cash equivalents at end of period	$ 42,429	$ 49,022

See accompanying notes to consolidated financial statements.

ENTEGRIS, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Summary of Significant Accounting Policies

In the opinion of the Company, the accompanying unaudited consolidated financial statements contain all adjustments necessary to present fairly, in conformity with accounting principles generally accepted in the United States of America, the financial position as of February 26, 2005 and August 28, 2004, the results of operations for the three months and six months ended February 26, 2005 and February 28, 2004, and shareholders' equity and cash flows for the six months ended February 26, 2005 and February 28, 2004.

Certain amounts reported in previous years have been reclassified to conform to the current year's presentation. In the second quarter of fiscal 2005, the Company began to classify its investment in auction-rate securities as short-term investments. These investments were included in cash and cash equivalents in previous periods ($33.2 million at August 28, 2004), and such amount has been reclassified in the accompanying financial statements to conform to the current period classification. This change in classification had no effect on the amounts of total current assets, total assets, net income, shareholders' equity or cash flow from operations of the Company. All of the Company's short-term investments are classified as available-for-sale at February 26, 2005 and are reflected as current assets based upon the Company's intent and ability to use any and all of the securities as necessary to satisfy the operational requirements of the Company's business.

The consolidated financial statements and notes are presented as permitted by Form 10-Q and do not contain certain information included in the Company's annual consolidated financial statements and notes. The information included in this Form 10-Q should be read in conjunction with Management's Discussion and Analysis and consolidated financial statements and notes thereto included in the Company's Form 10-K for the year ended August 28, 2004. The results of operations for the three months and six months ended February 26, 2005 and February 28, 2004 are not necessarily indicative of the results to be expected for the full year.

The Company's fiscal year is a 52- or 53-week period ending on the last Saturday of August. The fiscal years ending August 27, 2005 and August 28, 2004 comprised 52 weeks. In fiscal 2005, the Company's interim quarters end on November 27, 2004, February 26, 2005 and May 28, 2005. Fiscal years are identified in this report according to the calendar year in which they end. For example, the fiscal year ending August 27, 2005 is referred to as "fiscal 2005".

2. Stock-Based Compensation

The Company has two stock-based employee compensation plans. The Company accounts for these plans under the recognition and measurement principles of APB Opinion No. 25, *Accounting for Stock Issued to Employees* (APB 25), and related interpretations. The exercise price of the Company's employee stock options generally equals the market price of the underlying stock on the date of grant for all options granted, and thus, under APB 25, no compensation expense is recognized.

For employee stock options granted during the first six months of fiscal 2005, the Company determined pro forma compensation expense under the provisions of SFAS No. 123 using the Black-Scholes pricing model and the following assumptions: 1) an expected dividend yield of 0%, 2) an expected stock price volatility of 75%, 3) a risk-free interest rate of 3.5% and 4) an expected life of 6 years. The weighted average fair value of options granted during the first six months of fiscal 2005 with all exercise prices equal to the market price at the date of grant was $5.62.

During September 2004, the Compensation and Stock Option Committee (the Committee) of the Company's Board of Directors reviewed the Company's stock-based compensation plans in light of evolving compensation practices and the anticipated issuance by the Financial Accounting Standards Board (FASB) of its revision of FASB Statement No. 123, *Accounting for Stock-Based Compensation* (SFAS 123R)(subsequently issued in December 2004) which upon adoption requires all share-based payments to

employees, including grants of employee stock options, to be recognized in the Company's consolidated statement of operations based on their fair values. After consideration of various alternatives, the Committee approved the accelerated and full vesting of all unvested outstanding employee stock options with exercise prices above $9.21 issued prior to October 1, 2004. The effect of the vesting acceleration was the recognition of incremental additional stock-based employee compensation of approximately $6.0 million in the first quarter of fiscal 2005 in the Company's pro forma disclosure below. This previously deferred stock-based employee compensation expense amount would otherwise in part have been recognized in the Company's consolidated statement of operations in future periods after the adoption of SFAS 123R in the first quarter of fiscal 2006.

The following table illustrates the effect on net income and earnings per share if the Company had applied the fair value recognition provisions of FASB Statement No. 123, *Accounting for Stock-Based Compensation*, to stock-based employee compensation (in thousands, except per share data).

	Three Months Ended		Six Months Ended	
	February 26, 2005	February 28, 2004	February 26, 2005	February 28, 2004
Net income, as reported	$ 4,475	$ 5,023	$ 10,214	$ 6,660
Add stock-based compensation expense included in reported net earnings, net of tax	352	225	629	303
Deduct stock-based compensation expense under the fair value based method for all awards, net of tax	(1,655)	(2,054)	(9,335)	(3,774)
Pro forma net income	$ 3,172	$ 3,194	$ 1,508	$ 3,189
Basic net earnings per share, as reported	$ 0.06	$ 0.07	$ 0.14	$ 0.09
Pro forma basic net earnings per share	$ 0.04	$ 0.04	$ 0.02	$ 0.04
Diluted net earnings per share, as reported	$ 0.06	$ 0.07	$ 0.14	$ 0.09
Pro forma diluted net earnings per share	$ 0.04	$ 0.04	$ 0.02	$ 0.04

3. Earnings per share

The following table presents a reconciliation of the denominators used in the computation of basic and diluted earnings per share.

	Three Months Ended		Six Months Ended	
	February 26, 2005	February 28, 2004	February 26, 2005	February 28, 2004
Basic earnings per share-weighted common shares outstanding	73,347,000	72,844,000	73,304,000	72,710,000
Weighted common shares assumed upon exercise of stock options	2,082,000	3,785,000	1,943,000	3,538,000
Diluted earnings per share-weighted common shares and common shares equivalent outstanding	75,429,000	76,629,000	75,247,000	76,248,000

4. Inventories

Inventories consist of the following (in thousands):

	February 26, 2005	August 28, 2004
Raw materials	$ 16,385	$ 15,382
Work-in process	2,432	4,519
Finished goods	23,421	24,621
Supplies	692	664
Total inventories	$ 42,930	$ 45,186

5. Comprehensive Income

For the three months and six months ended February 26, 2005 and February 28, 2004 net income, items of other comprehensive income (loss) and comprehensive income are as follows (in thousands):

	Three months ended		Six months ended	
	February 26, 2005	February 28, 2004	February 26, 2005	February 28, 2004
Net income	$ 4,475	$ 5,023	$ 10,214	$ 6,660
Items of other comprehensive income (loss):				
Foreign currency translation (loss) gain	(152)	431	1,870	1,616
Net change in unrealized loss on marketable securities, net of tax	(4)	(1,034)	(4)	(543)
Reclassification adjustment for realized gain on sale of marketable securities included in earnings, net of tax	—	(183)	—	(566)
Comprehensive income	$ 4,319	$ 4,237	$ 12,080	$ 7,167

6. Intangible Assets and Goodwill

As of February 26, 2005, goodwill amounted to approximately $70.2 million. Other intangible assets, which include patents and other identifiable intangible assets, net of amortization, of approximately $23.2 million as of February 26, 2005, are being amortized over useful lives ranging from 3 to 17 years and are as follows (in thousands):

	As of February 26, 2005	
Amortized intangible assets:	Gross carrying amount	Accumulated amortization
Patents	$ 19,542	$ 8,707
Unpatented technology	9,844	3,659
Employment and noncompete agreements	5,837	3,517
Other	6,576	2,748
	$ 41,799	$ 18,631

Aggregate amortization expense for the first six months of fiscal 2005 amounted to $2.5 million. Estimated amortization expense for the fiscal years 2005 to 2009 and thereafter is approximately $2.9 million (remainder of fiscal 2005), $4.8 million, $4.3 million, $3.9 million, $3.0 million and $4.2 million, respectively.

7. Marketable Equity Securities

Marketable securities include the Company’s equity ownership in Nortem N.V. (formerly Metron Technology N.V.), a publicly traded security. The Company’s investment in Nortem N.V. (Nortem) is

accounted for as an available-for-sale security. At February 26, 2005, the Company owned approximately 1.1 million common shares of Nortem with a market value of $4.8 million based on the closing price of $4.59 per share on the NASDAQ Stock Market. At February 26, 2005, the unrealized gain on marketable securities was $1.6 million, net of taxes of $1.1 million.

On August 16, 2004, Metron Technology N.V. (Metron) announced that it had entered into an agreement with Applied Materials, Inc. (Applied), pursuant to which Applied would acquire the business assets of Metron. On December 14, 2004, Metron completed its sale to Applied of the outstanding shares of Metron's worldwide operating subsidiaries and substantially all of the other assets held at the Metron level. Immediately following the closing, Metron entered into liquidation and changed its name from Metron to Nortem NV.

On February 25, 2005, Nortem announced its intention to pay the first of two distributions to shareholders of record as of March 4, 2005, to be payable March 11, 2005, in the amount of $3.75 per share. A second distribution in the amount of $0.95 to $1.04 per share was also indicated, the timing of which is subject to various regulatory factors. Accordingly, based on the Company's carrying value of $2.00 per share and the indicated amount of the first cash distribution, the Company expects to record pre-tax gain of approximately $1.8 million in the third quarter (to be reflected as "Other income" in the Company's results of operations). In addition, all proceeds received in the final distribution would be recorded as "Other income". The Company is currently determining the tax ramifications of the proposed distributions.

Since the Company expects to receive the proceeds described above within twelve months, the Company has classified its investment in Nortem as a current asset as of February 26, 2005. In addition, as a result of the liquidation of Nortem, Nortem ceased to be an affiliate of the Company as of February 25, 2005. Accordingly, the Company no longer classifies its trade receivable due from Nortem separately in the accompanying balance sheet, nor will future sales to Applied be categorized as sales to affiliates.

In the first quarter of fiscal 2004, the Company reported other income of $0.6 million, which included a gain of $0.8 million, or $0.5 million after tax, on the sale of 346,100 shares of Metron's common stock.

8. Warranty

The Company accrues for warranty costs based on historical trends and the expected material and labor costs to provide warranty services. The majority of products sold are generally covered by a warranty for periods ranging from 90 days to one year. The following table summarizes the activity related to the product warranty liability for the three months and six months ended February 26, 2005 and February 28, 2004 (in thousands):

	Three Months Ended		Six Months Ended	
	February 26, 2005	February 26, 2005	February 26, 2005	February 28, 2004
Balance at beginning of period	$ 2,082	$ 2,061	$ 2,034	$ 2,065
Accrual for warranties issued during the period	293	133	622	280
Settlements during the period	(304)	(252)	(585)	(403)
Balance at end of period	$ 2,071	$ 1,942	$ 2,071	$ 1,942

9. Segment information

The Company operates in one segment as it designs, develops, manufactures, markets and sells material integrity management products and services predominantly within the microelectronics industry. All products are sold on a worldwide basis. The following table summarizes total net sales by markets served for the three months and six months ended February 26, 2005 and February 28, 2004, along with the year-to-year percentage changes (in thousands):

	Three Months Ended			Six Months Ended		
	February 26, 2005	February 28, 2004	Percentage change	February 26, 2005	February 28, 2004	Percentage change
Semiconductor	$ 64,525	$ 62,890	3%	$ 137,354	$ 113,185	21%
Data Storage	9,964	9,035	10	16,949	18,571	(9)
Services	7,059	4,464	58	14,048	9,264	52
Other	3,516	3,581	(2)	7,327	7,626	(4)
Net sales	$ 85,064	$ 79,970	6	$ 175,678	$ 148,646	18

10. Income Taxes

The Company's effective tax rate was 26.4% in the first six months of fiscal 2005. This effective rate was lower than the U.S. statutory rate partly due to a $500,000 tax benefit recorded in the first quarter of fiscal 2005 related to the favorable resolution of a U.S. Federal income tax refund claim made by the Company.

On October 22, 2004, the *American Jobs Creation Act of 2004* (the Act) was signed into law. The Act allows U.S. corporations a one-time deduction of 85 percent of certain "cash dividends" received from controlled foreign corporations. The deduction would be available to the Company in either fiscal 2005 or fiscal 2006. The Company has evaluated the effects of the Act on its plan for repatriation of foreign earnings and the related impact to its tax provision. The Company intends to continue to reinvest its undistributed international earnings in its international operations; therefore, no U.S. tax expense has been recorded to cover the repatriation of such undistributed earnings.

11. Gain on sale of building

During the first quarter of fiscal 2005, the Company sold a facility in Minnesota for $2.1 million in cash. The gain on the sale of $0.4 million is classified within cost of goods sold.

12. Contingent Liabilities

In September 2002, Lucent Technologies, Inc. named the Company as a defendant along with Poly-Flow Engineering Inc., FSI International, Inc. and BOC Capital Group in an action filed in circuit court in Orange County, Florida for damages arising from a chemical spill at its facility in January 2000. To date, Lucent has requested aggregate damages from all defendants in the range of $52 million, and has specifically requested damages of $12 million from the Company. While the outcome of this matter cannot be predicted with any certainty, based on the information to date, the Company believes that it has valid defenses to the claims and, furthermore, has adequate insurance to cover any damages assessed against the Company and as such, does not believe that the matter will have a material adverse effect on its financial position, operating results or cash flows. Accordingly, no amount has been accrued in the financial statements for such claim.

13. Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board (FASB) issued FASB Statement No. 123 (revised 2004), *Share-Based Payment*, which is a revision of FASB Statement No. 123, *Accounting for Stock-Based Compensation.* Statement 123(R) supersedes APB Opinion No. 25, *Accounting for Stock Issued to Employees*, and amends FASB Statement No. 95, *Statement of Cash Flows*. Statement 123(R)

requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values and the pro forma disclosure alternative is no longer allowable under Statement 123(R). The revised standard is effective for public entities in the first interim or annual reporting period beginning after June 15, 2005, which for the Company will be the first quarter of fiscal 2006 beginning August 28, 2005. The Company is currently evaluating the impact of the adoption of SFAS 123R, which will result in additional pre-tax compensation expense in fiscal 2006 for remaining unvested stock options and any future stock option grants. The ultimate amount of increased compensation expense will be dependent on the number of option shares granted, their timing and vesting periods, and the method used to calculate the fair value of the awards, among other factors.

In November 2003 and March 2004, the Emerging Issues Task Force (EITF) reached a consensus on EITF Issue No. 03-1, *The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments*. The consensus requires companies to apply new guidance for evaluating whether an investment is other-than-temporarily impaired and also requires quantitative and qualitative disclosure of debt and equity securities, classified as available-for-sale or held-to-maturity, that are determined to be only temporarily impaired at the balance sheet date. The Company incorporated the required disclosures for investments accounted for under SFAS No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, as required in fiscal year 2004. In September 2004, the consensus was indefinitely delayed as it relates to the measurement and recognition of impairment losses for all securities in the scope of paragraphs 10-20 of EITF 03-1. The disclosures prescribed by EITF No. 03-1 and guidance related to impairment measurement prior to the issuance of this consensus continue to remain in effect. Adoption is not expected to have a material impact on the Company's consolidated financial statements.

In November 2004, the FASB issued SFAS No. 151, *Inventory Costs, an amendment of Accounting Research Bulletin No. 43, Chapter 4*, which adopts wording from the International Accounting Standards Board's (IASB) IAS 2 *Inventories* in an effort to improve the comparability of cross-border financial reporting. The FASB and IASB both believe the standards have the same intent; however, an amendment to the wording was adopted to avoid inconsistent application. The new standard indicates that abnormal freight, handling costs, and wasted materials (spoilage) are required to be treated as current period charges rather than as a portion of inventory cost. Additionally, the standard clarifies that fixed production overhead should be allocated based on the normal capacity of a production facility. The statement is effective for the Company beginning in fiscal year 2007. Adoption is not expected to have a material impact on the Company's consolidated financial statements.

14. Subsequent Event

The Company entered into an Agreement and Plan of Merger dated as of March 21, 2005 (the "Merger Agreement") with Mykrolis Corporation, a Delaware corporation ("Mykrolis"), and Eagle DE, Inc., a Delaware corporation and wholly-owned subsidiary of the Company ("Eagle Delaware"). In addition, pursuant to the Merger Agreement, the Company entered into an Agreement and Plan of Merger as of March 21, 2005 (the "Reincorporation Merger Agreement") and together with the Merger Agreement, the "Merger Agreements") with Eagle Delaware.

Mykrolis Corporation is a developer, manufacturer and supplier of liquid and gas delivery systems, components and consumables used to measure, deliver, control and purify the process liquids, gases and chemicals that are used in the semiconductor manufacturing process. In addition, its products are used to manufacture flat-panel displays, high-purity chemicals, photoresists, solar cells, gas lasers, optical and magnetic storage devices and fiber-optic cables. Mykrolis's sales for the year ended December 31, 2004 were approximately $289 million.

Under the terms of the Merger Agreements, Entegris will reincorporate in Delaware by merging (the "Reincorporation Merger") into Eagle Delaware and each share of Entegris common stock, par value $0.01 per share, will be automatically exchanged for one fully paid and nonassessable share of Eagle Delaware common stock, par value $0.01 per share ("Eagle Delaware Common Stock"). In addition, Eagle Delaware will assume all options and restricted stock units then outstanding under Entegris' existing equity incentive

plans, and such options will be exercisable for, and such restricted stock units will be exchangeable for, shares of Eagle Delaware Common Stock, but otherwise on the same terms as were applicable to such options and restricted stock units prior to the Reincorporation Merger. Immediately following the Reincorporation Merger, Mykrolis will be merged (the "Merger") into Eagle Delaware. In the Merger, each outstanding share of Mykrolis common stock, par value $0.01 per share ("Mykrolis Common Stock"), will be automatically converted into the right to receive 1.39 (the "Exchange Ratio") fully paid and nonassessable shares of Eagle Delaware Common Stock. In addition, upon completion of the Merger, Eagle Delaware will assume all options then outstanding under Mykrolis' existing equity incentive plans, each of which will be exercisable for a number of shares of Eagle Delaware Common Stock (and at an exercise price) adjusted to reflect the Exchange Ratio. In connection with the mergers, the name of Eagle Delaware will be changed to Entegris, Inc.

Completion of the Reincorporation Merger and the Merger is subject to several conditions, including approval by Mykrolis' stockholders, approval by Entegris' shareholders, effectiveness of the Form S-4 registration statement to be filed with the Securities and Exchange Commission, expiration or termination of applicable waiting periods under the Hart-Scott-Rodino Antitrust Improvements Act of 1976 and clearance under any applicable foreign antitrust laws, and other customary closing conditions. The transaction is intended to qualify as a tax-free reorganization under Section 368(a) of the Internal Revenue Code of 1986, as amended. The Company and Mykrolis expect to close the transaction during the third calendar quarter of 2005.

The Merger Agreement provides that the board of directors of Eagle Delaware following the Merger will consist of eleven directors, including five directors selected from the current Mykrolis board, five directors selected from the current Entegris board and one independent director chosen by the new Eagle Delaware board of directors after the Merger.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview Entegris, Inc. is a leading provider of materials integrity management products and services that protect and transport the critical materials used in key technology-driven industries. Entegris derives most of its revenue from the sale of products and services to the semiconductor and data storage industries. The Company's customers consist primarily of semiconductor manufacturers, semiconductor equipment and materials suppliers, and hard disk manufacturers which are served through direct sales efforts, as well as sales and distribution relationships, in the United States, Asia and Europe.

The Company's fiscal year is a 52- or 53-week period ending on the last Saturday of August. The current fiscal year will end on August 27, 2005 and includes 52 weeks. The previous fiscal year ended on August 28, 2004 and also comprised 52 weeks. Fiscal years are identified in this report according to the calendar year in which they end. For example, the fiscal year ending August 27, 2005 is referred to as "fiscal 2005".

Forward-Looking Statements The information in this Management's Discussion and Analysis of Financial Condition and Results of Operations, except for the historical information, contains forward-looking statements. These statements are subject to risks and uncertainties. These forward-looking statements could differ materially from actual results. The Company assumes no obligation to publicly release the results of any revision or updates to these forward-looking statements to reflect future events or unanticipated occurrences. This discussion and analysis should be read in conjunction with the Consolidated Financial Statements and the related Notes, which are included elsewhere in this report.

Key operating factors Key factors, which management believes have the largest impact on the overall results of operations of Entegris, Inc. include:

- The level of sales. Since a large portion of the Company's product costs (excepting raw materials, purchased components and direct labor) are largely fixed in the short/medium term, an increase or decrease in sales affects gross profits and overall profitability significantly. Also, increases or decreases in sales and operating profitability affects certain costs such as incentive compensation, commissions and donations, all of which are highly variable in nature.

- The variable margin on sales, which is determined by selling prices and the cost of manufacturing and raw materials, has a large effect on profit. This factor is affected by a number of factors, which include the Company's sale mix, purchase prices of raw material, especially resin, purchased components, competition, both domestic and international, direct labor costs, and the efficiency of the Company's production operations, among others.
- The Company's fixed cost structure is significant. Accordingly, increases or decreases in these costs have a large impact on profitability. There are a number of large fixed or semi-fixed cost components, which include salaries, indirect labor, and benefits, and depreciation and amortization. Thus changes in amounts or usage of these cost components can have a large effect on the Company's results of operations.

Overall Summary of Second Quarter Fiscal 2004 Financial Results For the second quarter of fiscal 2005, net sales increased 6% from last year's second quarter, but fell 6% sequentially from the first quarter of fiscal 2005 reflecting softening of demand for some semiconductor product lines.

The Company reported flat gross profits compared to last year's second quarter. Combined with increased SG&A expenses and the absence of other income recorded a year earlier, the Company reported an 11% reduction in net income to $4.5 million for the period. When compared to the current fiscal year's first quarter, gross profits fell by 6% in line with the sales decrease, leading to a 22% decline in net earnings, despite slight reductions in SG&A and ER&D expenses.

During the second quarter of fiscal 2005, the Company generated cash flows of $16.2 million from operations. Cash, cash equivalents and short-term investments were $149.2 million at the end of the second quarter of fiscal 2005, compared with $133.2 million at the end of the fourth quarter of fiscal 2004.

Based on its assessment of activity levels in the semiconductor industry and current incoming order rates, and the expectation of strong demand for its data storage products, the Company expects sales for its third quarter ending May 28, 2005 to increase slightly compared to second-quarter results. Based on the sales expectation noted above and depending on product mix, the Company anticipates net income for the third quarter of fiscal 2005 in the range of $5.0 million to $6.0 million, or earnings per share of from $0.07 to $0.08.

Subsequent Event The Company entered into an Agreement and Plan of Merger with Mykrolis Corporation on March 21, 2005. Mykrolis Corporation is a developer, manufacturer and supplier of liquid and gas delivery systems, components and consumables used to measure, deliver, control and purify the process liquids, gases and chemicals that are used in the semiconductor manufacturing process. In addition, its products are used to manufacture flat-panel displays, high-purity chemicals, photoresists, solar cells, gas lasers, optical and magnetic storage devices and fiber-optic cables. Mykrolis's sales for the year ended December 31, 2004 were approximately $289 million. The Company and Mykrolis expect to close the transaction during the third calendar quarter of 2005.

Critical Accounting Policies Management's discussion and analysis of financial condition and results of operations are based upon the Company's consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires the Company to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. At each balance sheet date, management evaluates its estimates, including, but not limited to, those related to accounts receivable, warranty and sales return obligations, inventories, long-lived assets, and income taxes. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. The critical accounting policies affected most significantly by estimates, assumptions and judgments used in the preparation of the Company's consolidated financial statements are discussed below.

Allowance for Doubtful Accounts and Other Accounts Receivable-Related Valuation Accounts

The Company maintains an allowance for doubtful accounts as well as reserves for sales returns and allowances, and warranty claims. Significant management judgments and estimates must be made and used in connection with establishing these valuation accounts. Material differences could result in the amount and timing of the Company's results of operations for any period if we made different judgments or utilized different estimates. In addition, actual results could be different from the Company's current estimates, possibly resulting in increased future charges to earnings.

The Company provides an allowance for doubtful accounts for all individual receivables judged to be unlikely for collection. For all other accounts receivable, the Company records an allowance for doubtful accounts based on a combination of factors. Specifically, management analyzes the age of receivable balances, historical bad debts write-off experience, industry and geographic concentrations of customers, general customer creditworthiness and current economic trends when determining its allowance for doubtful accounts. The Company's allowance for doubtful accounts was $1.9 million and $1.8 million at February 26, 2005 and August 28, 2004, respectively.

A reserve for sales returns and allowances is established based on historical trends and current trends in product returns. At February 26, 2005 and August 28, 2004, the Company's reserve for sales returns and allowances was $0.8 million and $1.2 million, respectively.

The Company records a liability for estimated warranty claims. The amount of the accrual, which is classified as a current liability, is based on historical claims data by product group and other factors. Claims could be materially different from actual results for a variety of reasons, including a change in the Company's warranty policy in response to industry trends, competition or other external forces, manufacturing changes that could impact product quality, or as yet unrecognized defects in products sold. At February 26, 2005 and August 28, 2004, the Company's accrual for estimated future warranty costs was $2.1 million and $2.0 million, respectively. Both figures include $1.2 million in warranty liabilities recorded in connection with a fiscal 2003 acquisition.

Inventory Valuation The Company uses certain estimates and judgments to properly value inventory. In general, the Company's inventories are recorded at the lower of manufacturing cost or market value. Each quarter, the Company evaluates its ending inventories for obsolescence and excess quantities. This evaluation includes analyses of inventory levels, historical write-off trends, expected product lives, sales levels by product and projections of future sales demand. Inventories that are considered obsolete are written off or are reserved for fully. In addition, reserves are established for inventory quantities in excess of forecasted demand. Inventory reserves were $5.2 million at February 26, 2005 compared to $4.2 million at August 28, 2004.

The Company's inventories comprise materials and products subject to technological obsolescence, which are sold in highly competitive industries. If future demand or market conditions are less favorable than current analyses, additional inventory write-downs or reserves may be required and would be reflected in cost of sales in the period the revision is made.

Impairment of Long-Lived Assets The Company routinely considers whether indicators of impairment of its property and equipment assets, particularly its molding equipment, are present. If such indicators are present, it is determined whether the sum of the estimated undiscounted cash flows attributable to the assets in question is less than their carrying value. If less, an impairment loss is recognized based on the excess of the carrying amount of the assets over their respective fair values. Fair value is determined by discounted estimated future cash flows, appraisals or other methods deemed appropriate. If the assets determined to be impaired are to be held and used, the Company recognizes an impairment charge to the extent the present value of anticipated net cash flows attributable to the asset are less than the asset grouping's carrying value. The fair value of the asset then becomes the asset's new carrying value, which we depreciate over the remaining estimated useful life of the asset.

The Company assesses the impairment of intangible assets and related goodwill at least annually, or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors considered important which could trigger an impairment review, and potentially an impairment charge, include the following:

- significant underperformance relative to historical or projected future operating results;
- significant changes in the manner of use of the acquired assets or the Company's overall business strategy;
- significant negative industry or economic trends; and
- significant decline in the Company's stock price for a sustained period changing the Company's market capitalization relative to its net book value;

The Company's marketable equity securities are periodically reviewed to determine if declines in fair value below cost basis are other-than-temporary, requiring an impairment loss to be recorded and the investment written down to a new cost basis.

Income Taxes The Company is subject to income taxes in both the United States and numerous foreign jurisdictions. In the preparation of the Company's consolidated financial statements, management is required to estimate income taxes in each of the jurisdictions in which the Company operates. This process involves estimating actual current tax exposures together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included in the Company's consolidated balance sheet.

The Company has significant amounts of deferred tax assets. Management reviews its deferred tax assets for recoverability on a quarterly basis and assesses the need for valuation allowances. These deferred tax assets are evaluated by considering historical levels of income, estimates of future taxable income streams and the impact of tax planning strategies. A valuation allowance is recorded to reduce deferred tax assets when it is determined that it is more likely than not that the Company would not be able to realize all or part of its deferred tax assets. The Company carried no valuation allowance against its net deferred tax assets at either February 26, 2005 or August 28, 2004.

The Company establishes reserves for tax-related matters based on estimates of whether, and the extent to which, additional taxes and interest will be due. These reserves are established when, despite management's belief that the Company's tax return positions are fully supportable, it believes that certain positions are likely to be challenged and may not be probable of being sustained on review by tax authorities. These reserves are adjusted in light of changing facts and circumstances, such as the closing of a tax audit. The provision for income taxes includes the impact of reserve provisions and changes to reserves that are considered appropriate, as well as the related net interest.

On October 22, 2004, the *American Jobs Creation Act of 2004* (the Act) was signed into law. The Act allows U.S. corporations a one-time deduction of 85 percent of certain "cash dividends" received from controlled foreign corporations. The deduction would be available to the Company in either fiscal 2005 or fiscal 2006. The Company has evaluated the effects of the Act on its plan for repatriation of foreign earnings and the related impact to its tax provision. The Company intends to continue to reinvest its undistributed international earnings in its international operations; therefore, no U.S. tax expense has been recorded to cover the repatriation of such undistributed earnings.

Three and Six Months Ended February 26, 2005 Compared to Three and Six Months Ended February 26, 2004

The following table compares quarterly results with year-ago results, as a percent of sales, for each caption.

	Three Months Ended		Six Months Ended	
	February 26, 2005	February 28, 2004	February 26, 2005	February 28, 2004
Net sales	100.0%	100.0%	100.0%	100.0%
Cost of sales	59.1	56.7	59.1	58.2
Gross profit	40.9	43.3	40.9	41.8
Selling, general and administrative expenses	28.7	29.2	27.9	29.9
Engineering, research and development expenses	5.2	6.0	5.2	6.3
Operating income	7.0	8.1	7.8	5.6
Interest income, net	(0.3)	(0.1)	(0.4)	(0.1)
Other (income) expense, net	—	(0.8)	0.2	(0.8)
Income before income taxes and other items below	7.4	9.0	8.0	6.5
Income tax expense	2.0	2.7	2.1	2.0
Equity in net loss (income) of affiliate	—	—	—	—
Net income	5.3	6.3	5.8	4.5
Effective tax rate	27.5%	30.2%	26.4%	31.1%

Net sales Net sales were $85.1 million in the second quarter of fiscal 2004, up 6% compared to $80.0 million in the second quarter of fiscal 2004. Sequentially, sales for the quarter were 6% lower than the first quarter of fiscal 2005. Net sales for the first six months of fiscal 2005 were $175.7 million, up 18% from $148.6 million in the comparable year-ago period. Net sales for the three months and six months ended February 28, 2004 included favorable foreign currency effects, primarily related to the strengthening of the Japanese yen, in the amounts of $0.5 million and $0.8 million, respectively.

The following table summarizes total net sales by markets served for the three and six months ended February 26, 2005 and February 28, 2004 (in thousands), along with the year-to-year percentage changes:

	Three Months Ended			Six Months Ended		
	February 26, 2005	February 28, 2004	Percentage change	February 26, 2005	February 28, 2004	Percentage change
Semiconductor	$ 64,525	$ 62,890	3%	$ 137,354	$ 113,185	21%
Data storage	9,964	9,035	10	16,949	18,571	(9)
Services	7,059	4,464	58	14,048	9,264	52
Other	3,516	3,581	(2)	7,327	7,626	(4)
Net sales	$ 85,064	$ 79,970	6	$ 175,678	$ 148,646	18

The semiconductor market generated 76% of the Company's overall sales, compared to about 79% a year earlier, with sales up about 3% over the prior year's second quarter. On a year-over-year basis, quarterly sales were flat or down for most product groups, but were particularly strong for wafer carrier and fluid handling products.

Semiconductor market sales decreased from the 2005 first quarter to the fiscal 2005 second quarter by about 11%. Material-consumption-driven product sales were down 12%. For capital-spending-driven products, sales decreased declined about 11% from first quarter fiscal 2005 levels. However, 300 mm-related product sales remained strong.

Data storage market sales accounted for 12% percent of overall sales, compared to about 11% a year earlier, with sales up 10% from the year-ago period. Sequentially, sales were up by 43%. Demand for rigid disc media for consumer products translated into stronger sales and bookings momentum toward the end of the first quarter and continued to be solid throughout the second quarter.

Services market revenues accounted for 8% of Entegris' overall sales, compared to about 6% a year ago, with a 58% improvement over the year ago quarter, but were essentially flat compared to fiscal 2005's first quarter. There continued to be solid demand for the Company's cleaning equipment and it continues to expand services offering in the semiconductor, data storage and life sciences markets.

Life Sciences generated approximately 3% of Entegris' overall sales. Sales declined 15% from last year's first quarter and 3% from this year's first quarter. Order levels for Life Sciences' products were strong during the quarter. However, lead-times in this market are much longer, particularly for the Company's clean-in-place equipment offering. For example, lead-times for large "greenfield" constructions can extend over one year from our first engineering services sales to the delivery of the Company's systems and products, while lead-times for facility expansions or upgrades can extend 16 to 18 weeks from order to shipment.

On a geographic basis, total sales to North America were 37%, Asia Pacific 32%, Europe 16% and Japan 15%. Compared to the 2005 first quarter, sales improved in Asia Pacific by about 9% due to strength in the Data Storage market. Sales in Japan declined 17%, primarily because of lower wafer carrier sales and weakness for fluid-handling products. North American and European sales both declined by 2%. Sales increased from the second quarter 2004 to the second quarter 2005 in all geographic regions, except in Japan where sales were down 9% because of weakness in semiconductor products sales.

Based on current order rates, industry analyst expectations and other information, the Company expects sales to be flat to slightly up sequentially from second-quarter levels. Economic conditions, particularly for the semiconductor industry, remain difficult to project. There remain considerable risks related to a variety of factors. Accordingly, the Company's projection for next quarter is subject to uncertainty. In addition, industry volatility and uncertain market conditions make it difficult to forecast for future quarters.

Gross profit Gross profit in the second quarter of fiscal 2005 of $34.8 million were nearly flat with the $34.6 million reported in the second quarter of fiscal 2004. For the first six months of fiscal 2005, gross profit was $71.8 million, up 15% from $62.2 million recorded in the first six months of fiscal 2004. As a percentage of net sales, gross margins for the second quarter and first six months of the fiscal year were 40.9 % and 40.9%, respectively, compared to 43.3% and 41.8%, respectively, in the comparable periods a year ago.

Despite the 6% sales increase compared to last year's second quarter, gross profits rose only marginally in the second quarter of fiscal 2005. This was mainly the result of a change in product mix, with a relative shift from unit- and consumption-based products, margins of which benefit from more automation and less volatile order patterns, and an increase in Services market revenues.

On a sequential basis, the Company's second quarter gross margin percentage of 40.9% was essentially unchanged from the first quarter figure of 40.8%. This was slightly better than expected in light of sequential reductions in sales of over $5.6 million and in inventory of $3.0 million, as sales and inventory declines negatively impact margins because of the resulting reduction in overhead absorption. During the quarter, the company continued to trim its temporary staffing in manufacturing, which helped to improve margins.

Margins also began to reflect higher raw material prices, primarily because of polymer price increases. Polymers make up approximately 30% of the Company's cost of goods sold. The worldwide demand for oil-based polymers is very high and supply has not kept pace, leading suppliers to pass pricing increases onto their customers, including Entegris. The Company is managing this very closely. The margin impact from these price increases is under 50 basis points year-to-date. Long-term contracts for some polymers have helped mitigate the effects of this situation. In addition, the Company has begun to go to its customers with price increases to offset these higher costs. Other companies in the industry are taking this approach as well.

Year-to-date gross profit included a gain of $0.4 million on the sale of a facility during the first quarter.

Selling, general and administrative expenses Selling, general and administrative (SG&A) expenses increased by $1.1 million, or 5%, to $24.4 million in the second quarter of fiscal 2005 from $23.3 million in the second quarter of fiscal 2004. SG&A expenses for the second quarter were down slightly from the first quarter of fiscal 2005. On a year-to-year basis, SG&A expenses rose by $4.6 million, or 10% to $49.0 million compared to $44.4 million a year earlier. On a year-to-date basis, SG&A costs, as a percent of net sales, decreased to 27.9% from 29.9% a year ago. This decline reflects the higher SG&A costs being more than offset by the Company's increase in net sales.

The year-over-year increase for the quarter was due to higher sales commissions ($0.4 million) and increased incentive pay, profit-sharing and donation accruals ($0.4 million). The year-to-year increase for the six-month period was primarily due to higher restricted stock expense ($0.5 million), higher sales commissions ($1.2 million), and incentive pay and donation accruals ($1.9 million).

Engineering, research and development expenses Engineering, research and development (ER&D) expenses fell by $0.4 million, or 9%, to $4.4 million in the second quarter of fiscal 2005 as compared to $4.8 million for the same period in fiscal 2004. ER&D expenses decreased $0.3 million, or 4%, to $9.1 million in the first six months of fiscal 2005 as compared to $9.4 million in the year-ago period. ER&D expenses, as a percent of net sales, decreased to 5.2% from 6.3%, mainly reflecting the Company's higher net sales. The Company continued to focus on the support of current product lines, and the development of new products and manufacturing technologies.

Interest income, net Net interest income of $0.3 million in the second quarter of fiscal 2005 compared to $64,000 in the year-ago period. Net interest income was $0.6 million in the first half of fiscal 2005 compared to $0.1 million in the first half of fiscal 2004. The increases reflects higher average net invested balance as well as slightly higher rates of interest available on the Company's investment in short-term debt securities compared to a year ago.

Other expense (income), net Other income was nominal in the second quarter of fiscal 2005 compared to other income of $0.7 million in the year-ago quarter. Other expense was $0.4 million in the first half of fiscal 2005 compared to other income of $1.2 million in the first half of fiscal 2003.

Other expense in the first half of fiscal 2005 primarily consisted of foreign currency transaction losses.

Included in other income in the three months and six months ended February 28, 2004 were gains of $0.3 million and $1.1 million, respectively, on the sale of 121,100 and 467,200 shares, respectively, of Nortem N.V. (formerly Metron Technology N.V.) common stock.

Income tax expense (benefit) The Company recorded income tax expense of $1.7 million for the second quarter of fiscal 2005 compared to income tax expense of $2.2 million for the second quarter a year earlier. For the first half of fiscal 2005, the Company booked income tax expense of $3.7 million compared to income tax expense of $3.0 million in the first six months of fiscal 2004.

The effective year-to-date tax rate is 26.4% in fiscal 2005, compared to 31.1% for the first half of fiscal 2004. The lower rate in fiscal 2005 includes a $500,000 tax benefit that was recorded due to a final resolution of a U.S. Federal income tax refund claim made by the Company. The Company's tax rate is also below the U.S. statutory rate due to lower taxes on foreign operations, a tax benefit associated with export activities, and a tax credit associated with R&D activities.

Based on the current analysis of its tax situation, the Company anticipates the effective tax rate for the full fiscal year 2005 to be about 30%, exclusive of the tax benefit of $500,000 noted above. However, tax calculations are complex and sensitive to estimates of annual levels of profitability. Therefore, it is possible that there will be volatility in the Company's effective tax rate during the remainder of the fiscal year.

On October 22, 2004, the *American Jobs Creation Act of 2004* (the Act) was signed into law. The Act allows U.S. corporations a one-time deduction of 85 percent of certain "cash dividends" received from controlled foreign corporations. The deduction would be available to the Company in either fiscal 2005 or fiscal 2006. The Company has evaluated the effects of the Act on its plan for repatriation of foreign

earnings and the related impact to its tax provision. The Company intends to continue to reinvest its undistributed international earnings in its international operations; therefore, no U.S. tax expense has been recorded to cover the repatriation of such undistributed earnings.

In addition, the Act includes numerous law changes that will affect the Company's tax computations. The provisions of the Act include a new deduction for U.S. manufacturers and the repeal of the extraterritorial income exclusion. The Company is studying the new law to determine what impact, if any, the Act will have on its effective tax rate in future fiscal years.

Net income The Company recorded net income of $4.5 million, or $0.06 per diluted share, in the second quarter of fiscal 2005, compared to net income of $5.0 million, or $0.07 per diluted share, in the second quarter of fiscal 2004. For the six months ended February 26, 2005, the Company recorded net income of $10.2 million, or $0.14 per diluted share, compared to net income of $6.7 million, or $0.09 per diluted share, in the comparable period a year ago.

Based on the range of sales forecasted above, the Company anticipates net income for the third quarter of fiscal 2005 in the range of $5.0 million to $6.0 million, or earnings per share of from $0.07 to $0.08, including the expected gain on the Company's Nortem investment.

Liquidity and Capital Resources

Operating activities Cash flow provided by operating activities totaled $23.0 million in the first half of fiscal 2005. The cash flow generated from operations mainly reflected the Company's net earnings of $10.2 million, combined with various noncash charges, including depreciation and amortization of $11.6. The net impact of working capital demands was nominal. Working capital at February 26, 2005 stood at $222.7 million, up $23.0 million from August 28, 2004, and included $149.2 million in cash, cash equivalents and short-term investments.

After accounting for foreign currency translation adjustments, inventories decreased by $2.8 million from August 28, 2004. The decrease mainly reflected the lower work-in-process and finished goods associated with the Company's decreased sales activity. Accounts receivable, net of foreign currency translation adjustments, decreased by $9.9 million, reflecting the quarter's lower sales. However, days sales outstanding increased slightly from 64 days at the beginning of the year to 66 days at the end of the second quarter. Accounts payable and accrued liabilities decreased by $9.2 million from August 28, 2004 mainly due to the payment of fiscal 2004 accrued incentive compensation.

Investing activities Cash flow used in investing activities totaled $22.0 million in the first half of fiscal 2005. Acquisition of property and equipment totaled $7.1 million, primarily for additions of manufacturing, computer and laboratory equipment. The Company expects capital expenditures in the range of $20 million to $25 million during fiscal 2005, consisting mainly of spending on facilities expansions, manufacturing equipment, tooling and information systems.

The company had purchases of short-term investments, net of maturities, of $16.1 million during the first half of fiscal 2005. Short-term investments stood at $106.8 million at February 26, 2005.

The Company's investments include equity ownership in Nortem N.V. (formerly Metron Technology N.V.), a publicly traded security. The Company's investment in Nortem N.V. (Nortem) is accounted for as an available-for-sale security. At February 26, 2005, the Company owned approximately 1.1 million common shares of Nortem with a market value of $4.8 million based on the closing price of $4.59 per share on the NASDAQ Stock Market. On August 16, 2004, Metron Technology N.V. (Metron) announced that it had entered into an agreement with Applied Materials, Inc. (Applied), pursuant to which Applied would acquire the business assets of Metron. On December 14, 2004, Metron completed its sale to Applied of the outstanding shares of Metron's worldwide operating subsidiaries and substantially all of the other assets held at the Metron level. Immediately following the closing, Metron entered into liquidation and changed its name from Metron to Nortem NV. On February 25, 2005, Nortem announced its intention to pay the first of two distributions to shareholders of record as of March 4, 2005, to be payable March 11, 2005, in the

amount of $3.75 per share. A second distribution in the amount of $0.95 to $1.04 per share was also indicated, the timing of which is subject to various regulatory factors. As a result, fiscal 2005 earnings are expected to be positively affected by a pre-tax gain of approximately $2.9 million related to the liquidation of the Company's investment in Nortem common stock based on estimated proceeds of $5.0 million.

Financing activities Cash used by financing activities totaled $1.2 million during the first six months of fiscal 2005. The Company made payments of $9.1 million on borrowings, while proceeds from new borrowings totaled $8.4 million during the first half of fiscal 2005. In addition, the Company received proceeds of $1.4 million in connection with common shares issued under the Company's stock option and employee stock purchase plans.

The Company repurchased 223,600 common shares for $1.8 million, all of which occurred in the first quarter of fiscal 2005, as part of a 500,000 share repurchase authorization made by the Company board of directors in fiscal 2001. In addition, also during the first quarter of fiscal 2005, the Company's board of directors authorized a new $25 million share repurchase program. Repurchases will be funded from the company's cash and short-term investment balances. Management believes this is a prudent use of cash. Under the programs, shares may be bought at management's discretion from time to time, depending on market conditions, in open market transactions. The programs may be suspended or terminated at Entegris' discretion.

As of February 26, 2005, the Company's sources of available funds comprised $42.4 million in cash and cash equivalents, $106.8 million in short-term investments and various credit facilities. Entegris has an unsecured revolving credit agreement with two domestic commercial banks with aggregate borrowing capacity of $40 million, with no borrowings outstanding at February 26, 2005 and lines of credit with six international banks that provide for borrowings of currencies for the Company's overseas subsidiaries, equivalent to an aggregate of approximately $17.4 million. Borrowings outstanding on these lines of credit were approximately $5.3 million at February 26, 2005.

Under the unsecured revolving credit agreement, the Company is subject to, and is in compliance with, certain financial covenants including ratios requiring a fixed charge coverage of not less than 1.10 to 1.00 and a leverage ratio of not more than 2.25 to 1.00. In addition, the Company must maintain a calculated consolidated and domestic tangible net worth, which, as of February 26, 2005, are $238 million and $125 million, respectively, while also maintaining consolidated and domestic aggregate amounts of cash and short-term investments of not less than $75 million and $40 million, respectively.

At February 26, 2005, the Company's shareholders' equity stood at $384.9 million compared to $372.2 million at the beginning of the year. The primary components of the increase included the Company's net earnings of $10.2 million and an increase in other comprehensive income of $1.9 million, offset by the repurchase of the Company's common shares for $1.8 million noted above.

The Company believes that its cash and cash equivalents, short-term investments, cash flow from operations and available credit facilities will be sufficient to meet its working capital and investment requirements for the next 12 months. However, future growth, including potential acquisitions, may require the Company to raise capital through additional equity or debt financing. There can be no assurance that any such financing would be available on commercially acceptable terms.

On June 9, 2003, the Company announced that it had filed a shelf registration statement with the Securities and Exchange Commission. As amended, up to 25 million shares of the Company's common stock may be offered from time to time under the registration statement, including 17.5 million newly issued shares by Entegris and 7.5 million currently outstanding shares by certain shareholders of the Company. The Company stated that it would use the net proceeds from any future sale of new Entegris shares for general corporate purposes or to finance acquisitions. The Company would not receive any proceeds from any sale of shares by the selling shareholders. The shelf registration statement became effective as of May 19, 2004 and is effective for two years from that date.

Cautionary Statements This report contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements may include forward-looking statements which reflect the Company's current views with respect to future events and financial performance. The words "believe," "expect," "anticipate," "intends," "estimate," "forecast," "project," "should" and similar expressions are intended to identify "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. All forecasts and projections in this document are "forward-looking statements," and are based on management's current expectations of the Company's near-term results, based on current information available pertaining to the Company, including the risk factors identified in the Company's Annual Report on Form 10-K for the fiscal year ended August 28, 2004 and its quarterly reports on Form 10-Q and current reports on Form 8-K as filed with the Securities and Exchange Commission. Such risks, uncertainties and other factors include, among others: general economic and business conditions and industry trends in the countries in which the Company operates; currency exchange risks; the continued strength of the industries in which the Company operates; uncertainties inherent in proposed business strategies and development plans; rapid technological changes; future financial performance, including availability, terms and deployment of capital; availability of qualified personnel; changes in, or the failure or the inability to comply with, government regulation in the countries in which the Company operates, and adverse outcomes from regulatory proceedings; changes in the nature of key strategic relationships with partners and joint venturers; competitor responses to the products and the ability of the Company to satisfy the conditions to closing specified in the Merger Agreements with Mykrolis.

Item 3: Quantitative and Qualitative Disclosures About Market Risk

Entegris' principal market risks are sensitive to changes in interest rates and foreign currency exchange rates. The Company's current exposure to interest rate fluctuations is not significant. Most of its long-term debt at February 26, 2005 carries fixed rates of interest. The Company's cash equivalents and short-term investments are debt instruments with maturities of 12 months or less. A 100 basis point change in interest rates would potentially increase or decrease net income by approximately $0.9 million annually.

The Company uses derivative financial instruments to manage foreign currency exchange rate risk associated with the sale of products in currencies other than the U.S. dollar. At February 26, 2005, the company was party to forward contracts to deliver Japanese Yen and Euros with notional value of approximately $11.7 million and $3.0 million, respectively. The cash flows and earnings of foreign-based operations are also subject to fluctuations in foreign exchange rates. A hypothetical 10% change in the foreign currency exchange rates would potentially increase or decrease net income by approximately $3.0 million.

Item 4: Controls and Procedures

(a) Evaluation of disclosure controls and procedures. Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed in the reports that are filed or submitted under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commissions' rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in the reports that are filed under the Exchange Act is accumulated and communicated to management, including the chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure. Under the supervision of and with the participation of management, including the chief executive officer and chief financial officer, the Company has evaluated the effectiveness of the design and operation of its disclosure controls and procedures as of February 25, 2005, and based on its evaluation, our chief executive officer and chief financial officer have concluded that these controls and procedures are effective.

(b) Changes in internal control over financial reporting. There have been no significant changes in internal controls or in other factors that could significantly affect these controls subsequent to the date of the evaluation described above, including any corrective actions with regard to significant deficiencies and material weaknesses.

PART II

OTHER INFORMATION

Item 1. Legal Proceedings

In September 2002, Lucent Technologies, Inc. and its insurers named the Company as one of several defendants in an action filed in circuit court in Orange County, Florida for damages arising from a chemical spill at its facility in January 2000. In late February of 2005, Lucent served a demand increasing its requested damages from the Company to $35 million in addition to plaintiffs' demand for punitive damages. This case is currently scheduled for trial in September of 2005. While the outcome of this matter cannot be predicted with any certainty, based on the information to date, the Company believes that it has valid defenses to the claims and does not believe that the matter will have a material adverse effect on its financial position, operating results or cash flows. Accordingly, no amount has been accrued in the consolidated financial statements for such claim.

The Company does have insurance coverage that may apply to plaintiff's claims, other than claims for punitive damages. The insurer having the largest exposure for payment of covered claims is no longer issuing new insurance and has filed a commercial run-off plan with the Illinois Division of Insurance. The Illinois Division of Insurance has substantial discretion to control the insurer. Consequently, these circumstances could possibly prevent payment by that insurer of some or all of its covered claims. For these reasons, the Company cannot give absolute assurance as to what portion of the plaintiffs' claims, if sustained, would be satisfied by insurance coverage.

Item 4. Submission of Matters to a Vote of Security Holders

The Entegris, Inc. Annual Meeting of Shareholders was held on January 18, 2005. There were 73,539,756 outstanding shares of common stock on the record date for the Annual Meeting; 69,720,968, or 94.81%, of the outstanding shares were represented in person or by proxy at the meeting. The results of the vote of shareholders are shown below.

	Number of Shares	
Election of Class III Directors:	**For**	**Withheld**
Gary F. Klingl	67,405,791	2,315,177
Roger D. McDaniel	68,220,287	1,500,681
Paul L.H. Olson	68,379,797	1,341,171
Brian F. Sullivan	49,435,428	20,285,540
Donald M. Sullivan	68,376,035	1,344,933

	In Favor	**Against**	**Abstain**	**Broker Non-Votes**
To ratify and approve the appointment of KPMG LLP as the Company's independent registered public accounting firm for the Company's fiscal year ending August 27, 2005.	69,599,243	51,013	70,712	—
To approve an amendment to the Entegris, Inc. 1999 Long-Term Incentive and Stock Option Plan to prohibit the repricing of stock options once awarded.	59,556,935	217,473	37,233	9,909,327
To approve an amendment to the Entegris, Inc. Outside Directors' Plan to allow the grant of restricted stock awards.	55,476,357	4,071,105	264,179	9,909,327

Item 6. Exhibits and Reports on Form 8-K

(a) Exhibits:

3.1	Articles of Incorporation of Entegris, Inc., as amended
3.2	Amended and Restated Bylaws of Entegris, Inc.
10.1(i)	Agreement and Plan of Merger, dated as of March 21, 2005, by and among Entegris, Inc., Mykrolis Corporation and Eagle DE, Inc.
10.2(i)	Agreement and Plan of Merger, entered into as of March 21, 2005, by and between Entegris, Inc. and Eagle DE, Inc.
10.3	Entegris, Inc. 1999 Long-Term Incentive and Stock Option Plan, as amended
10.4	Entegris, Inc. Outside Directors' Option Plan, as amended
10.5	Sixth Amendment to Credit Agreement, dated as of October 5, 2004, among Entegris, Inc. and Norwest Bank Minnesota, N.A. and Harris Trust and Savings Bank
10.6	Seventh Amendment to Credit Agreement, dated as of February 25, 2005, among Entegris, Inc. and Norwest Bank Minnesota, N.A. and Harris Trust and Savings Bank Entegris
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

(i) Incorporated by reference from the Company's Report on Form 8-K filed by the Company on March 21, 2005.

(b) Reports on Form 8-K

On December 16, 2004, the Company filed a current report on Form 8-K to furnish a copy of the Company's press release dated December 16, 2004 reporting the Company's financial results for its first quarter ended November 27, 2004.

On January 20, 2005, the Company filed a current report on Form 8-K to report that Michael W. Wright was being named President of the Company in addition to his current title of Chief Operating Officer. The Company's Board of Directors had ratified Mr. Wright's appointment on January 18, 2005.

CONFORMED COPY

SIGNATURES

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.

Date: April 7, 2005

/s/ James E. Dauwalter

James E. Dauwalter
Chief Executive Officer

Date: April 7, 2005

/s/ John D. Villas

John D. Villas
Chief Financial Officer

EXHIBIT 3.1

ARTICLES OF INCORPORATION OF ENTEGRIS, INC.

ARTICLE I

Name

The name of this corporation shall be Entegris, Inc.

ARTICLE II

Registered Office

The location and address of this corporation's registered office shall be 3500 Lyman Boulevard, Chaska, MN 55318.

ARTICLE III

Authorized Capital

The total authorized number of shares of this corporation is two hundred million (200,000,000) shares, all of which shall be shares of common stock, with a par value of one cent ($0.01) per share.

ARTICLE IV

Cumulative Voting Rights

The shareholders of this corporation shall have no rights of cumulative voting for the election of directors.

ARTICLE V

Preemptive Rights

The shareholders of this corporation shall have no rights, preemptive or otherwise, to acquire any part of any unissued shares or other securities of this corporation, or of any rights to purchase shares or other securities of this corporation, before the corporation may offer them to other persons.

ARTICLE VI

Incorporator

The name and address of the incorporator of this corporation is Jay L. Bennett, Dunkley, Bennett & Christensen, P.A., 701 Fourth Avenue South, Minneapolis, MN 55415.

ARTICLE VI

Board of Directors Written Action

Any action required or permitted to be taken at a meeting of the Board of Directors may be taken by written action signed by all of the directors then in office, unless the action is one which need not be approved by the shareholders, in which case such action shall be effective if signed by the number of directors that would be required to take the same action at a meeting at which all directors were present.

ARTICLE VIII

Limitation of Director Liability

A director of the corporation shall not be personally liable to the corporation or its shareholders for monetary damages for breach of fiduciary duty as a director, except for (i) liability based on a breach of the duty of loyalty to the corporation or the shareholders; (ii) liability for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law; (iii) liability based on the payment of an improper dividend or an improper repurchase of the corporation's stock under Minnesota Statutes Section 302A.559, or a sale of unregistered securities or securities fraud under Minnesota Statutes Section 80A.23; (iv) liability for any transaction from which the director derived an improper personal benefit; or (v) liability for any act or omission occurring prior to the effective date of these Articles. If Minnesota Statutes Chapter 302A, the Minnesota Business Corporation Act, hereafter is amended to authorize the further elimination or limitation of the liability of directors, then the liability of a director of the corporation in addition to the limitation on personal liability provided herein, shall be limited to the fullest extent permitted by the amended Chapter 302A, the Minnesota Business Corporation Act. Any repeal or modification of this Article by the shareholders of the corporation shall be prospective only and shall not adversely affect any limitation on the personal liability of a director of the corporation existing at the time of such repeal or modification.

Exhibit 3.2

AMENDED AND RESTATED BYLAWS
OF
ENTEGRIS, INC.

ARTICLE 1
Offices

1.1 Principal Executive Office. Unless otherwise designated by the Board of Directors of the corporation, the principal executive office of the corporation shall be the registered office of the corporation as set forth in the Articles of Incorporation or in the most recent amendment of the Articles of Incorporation or statement of the Board of Directors filed with the Secretary of State of Minnesota changing the registered office in the manner prescribed by law.

1.2 Other Offices. The corporation may have such other offices, within or without the State of Minnesota, as the Board of Directors shall, from time to time, determine.

ARTICLE 2
Meetings of Shareholders

2.1 Time and Place of Meetings. All meetings of the shareholders of this corporation shall be held on the date and at the time and place (within or without the State of Minnesota) designated by the Board of Directors in the notices of meeting. Any regular or special meeting of the shareholders of the corporation called by or held pursuant to a written demand of shareholders shall be held in the county where the principal executive office of the corporation is located.

2.2 Regular Meetings. Regular meetings of the shareholders of this corporation may be held at the discretion of the Board of Directors on an annual or less frequent periodic basis on such dates and at such times and places as may be designated by the Board of Directors in the notices of meeting. At regular meetings the shareholders shall elect a Board of Directors and transact such other business as may be appropriate for action by shareholders. If a regular meeting of shareholders has not been held for a period of fifteen (15) months, one or more shareholders holding not less than three percent (3%) of the voting power of all shares of the corporation entitled to vote may call a regular meeting of shareholders by delivering to the chief executive officer or chief financial officer a written demand for a regular meeting. Within thirty (30) days after the receipt of such a written demand by the chief executive officer or chief financial officer, the Board of Directors shall cause a regular meeting of shareholders to be called and held on notice no later than ninety (90) days after the receipt of such written demand, all at the expense of the corporation.

2.3 Special Meetings. Special meetings of the shareholders, for any purpose or purposes appropriate for action by shareholders, may be called by the chief executive officer, the chief financial officer, or by the Board of Directors or any two or more members thereof. Such meeting shall be held on such date and at such time and place as shall be fixed by the person or persons calling the meeting and designated in the notice of meeting. A special meeting may also be called by

one or more shareholders holding ten percent (10%) or more of the voting power of all shares of the corporation entitled to vote, except that a special meeting for the purpose of considering any action to directly or indirectly facilitate or effect a business combination, including any action to change or otherwise affect the composition of the Board of Directors for that purpose, must be called by shareholders holding twenty-five percent (25%) or more of the voting power of all shares entitled to vote. The shareholders calling such meetings shall deliver to the chief executive officer or chief financial officer a written demand for a special meeting, which demand shall contain the purposes of the meeting. Within thirty (30) days after the receipt of such a written demand for a special meeting of shareholders by the chief executive officer or chief financial officer, the Board of Directors shall cause a special meeting of shareholders to be called and held on notice no later than ninety (90) days after the receipt of such written demand, all at the expense of the corporation. Business transacted at any special meeting of shareholders shall be limited to the purpose or purposes stated in the notice of meeting. Any business transacted at any special meeting of shareholders that is not included among the stated purposes of such meeting shall be voidable by or on behalf of the corporation unless all of the shareholders have waived notice of the meeting.

2.4 Notice of Meetings. Except where a meeting of shareholders is an adjourned meeting and the date, time, and place of such meeting were announced at the time of adjournment, notice of all meetings of shareholders stating the date, time, and place thereof, and any other information required by law or desired by the Board of Directors or by such other person or persons calling the meeting, and in the case of special meetings, the purpose thereof, shall be given to each shareholder of record entitled to vote at such meeting not less than three (3) nor more than sixty (60) days prior to the date of such meeting. If a plan of merger or exchange or the sale or other disposition of all or substantially all of the assets of the corporation is to be considered at a meeting of shareholders, notice of such meeting shall be given to every shareholder, whether or not entitled to vote. The notice of meeting at which there is to be considered a proposal to adopt a plan of merger or exchange or the sale or other disposition of all or substantially all of the assets of the corporation shall be given not less than fourteen (14) days prior to the date of such meeting, shall state the purpose of such meeting, and, where a plan of merger or exchange is to be considered, shall include a copy or a short description of the plan. Notices of meeting shall be given to each shareholder entitled thereto by oral communication, by mailing a copy thereof to such shareholder at an address designated by such shareholder or to the last known address of such shareholder, by handing a copy thereof to such shareholder, or by any other delivery that conforms to law. Notice by mail shall be deemed given when deposited in the United States mail with sufficient postage affixed. Notice shall be deemed received when it is given.

2.5 Waiver of Notice. Any shareholder may waive notice of any meeting of shareholders. Waiver of notice shall be effective whether given before, at, or after the meeting and whether given orally, in writing, or by attendance. Attendance by a shareholder at a meeting is a waiver of notice of that meeting, except where the shareholder objects at the beginning of the meeting to the transaction of business because the meeting is not lawfully called or convened and does not participate thereafter in the meeting, or objects before a vote on an item of business because the item may not lawfully be considered at that meeting and does not participate in the consideration of that item at the meeting.

2.6 Record Date. The Board of Directors may fix a time, not exceeding sixty (60) days preceding the date of any meeting of shareholders, as a record date for the determination of the shareholders entitled to notice of and to vote at such meeting, notwithstanding any transfer of shares on the books of the corporation after any record date so fixed.

2.7 Quorum. The holders of a majority of the voting power of all shares of the corporation entitled to vote at a meeting shall constitute a quorum at a meeting of shareholders for the purpose of taking any action other than adjourning such meeting. If a quorum is present when a duly called or held meeting is convened, the shareholders present may continue to transact business until adjournment, even though the withdrawal of a number of shareholders originally represented leaves less than the number otherwise required for a quorum.

2.8 Voting and Proxies. At each meeting of the shareholders, every shareholder having the right to vote shall be entitled to vote either in person or by proxy. Each shareholder shall have one vote for each share held by such shareholder, except as may be otherwise provided in the Articles of Incorporation or the terms of the share or as may be required to provide for cumulative voting (if not denied by the Articles of Incorporation). No appointment of a proxy, however, shall be valid for any purposes more than eleven (11) months after the date of its execution, unless a longer period is expressly provided in the appointment. Every appointment of a proxy shall be in writing, and shall be filed with the secretary of the corporation before or at the meeting at which the appointment is to be effective. An appointment of a proxy for shares held jointly by two or more shareholders shall be valid if signed by any one of them, unless the secretary of the corporation receives from any one of such shareholders written notice either denying the authority of another of such shareholders to appoint a proxy or appointing a different proxy. All questions regarding the qualification of voters, the validity of appointments of proxies, and the acceptance or rejection of votes shall be decided by the presiding officer of the meeting. The shareholders shall take action by the affirmative vote of the holders of a majority of the voting power of the shares present, in person or represented by proxy, and entitled to vote, except where a different vote is required by law, the Articles of Incorporation, or these Bylaws.

2.9 Action Without a Meeting. Any action required or permitted to be taken at a meeting of the shareholders may be taken without a meeting by written action signed by all of the shareholders entitled to vote on such action. Such written action shall be effective when signed by all of the shareholders entitled to vote thereon or at such different effective time as is provided in the written action.

ARTICLE 3
Directors

3.1 General Powers. Except as authorized by the shareholders pursuant to a shareholder control agreement or unanimous action, the business and affairs of the corporation shall be managed by or shall be under the direction of the Board of Directors. The directors may exercise all such powers and do all such things as may be exercised or done by the corporation, subject to the provisions of applicable law, the Articles of Incorporation, and these Bylaws.

3.2 Number, Qualifications and Term of Office. The Board of Directors shall consist of up to nine (9) members. Any change in the number of directors on the Board of Directors (including, without limitation, changes at annual meetings of shareholders) shall be approved by the affirmative vote of not less than fifty-one (51%) of the votes entitled to be cast by the holders of all

then outstanding shares of voting stock, voting together as a single class, unless such change shall have been approved by a majority of the entire Board of Directors. If such change shall not have been so approved, the number of directors shall remain the same. No decrease in the number of directors pursuant to this section shall shorten the term of any incumbent director or effect the removal of any director then in office except upon compliance with the provisions of Section 3.10. Each director shall be elected at a regular meeting of the shareholders and thereafter until a successor shall have been elected and shall qualify, unless a prior vacancy shall occur by reason of death, resignation or removal from office.

3.2 Meetings. Meetings of the Board of Directors may be held from time to time at any place within or without the State of Minnesota that the Board of Directors may designate. Meetings of the Board of Directors also may be called by the chief executive officer, or by any director, in which case the person or persons calling such meeting may fix the date, time, and place thereof, either within or without the State of Minnesota, and shall cause notice of meeting to be given.

3.3 Notice of Meetings. If a meeting schedule is adopted by the Board, or if the date and time of a Board meeting has been announced at a previous meeting, no notice is required. In all other cases three (3) days' notice of meetings of the Board of Directors, stating the date and time thereof, and any other information required by law or desired by the person or persons calling such meeting, shall be given to each director. If notice of meeting is required, and such notice does not state the place of the meeting, such meeting shall be held at the principal executive office of the corporation. Notice of meetings of the Board of Directors shall be given to directors in the manner provided in these Bylaws for giving notice to shareholders of meetings of shareholders.

3.4 Waiver of Notice. A director may waive notice of a meeting of the Board. A waiver of notice by a director is effective, whether given before, at or after the meeting and whether given in writing, orally or by attendance. The attendance of a director at any meeting shall constitute a waiver of notice of such meeting, unless such director objects at the beginning of the meeting to the transaction of business on the grounds that the meeting is not lawfully called or convened and does not participate thereafter in the meeting.

3.5 Quorum and Voting. A majority of the directors currently holding office is a quorum for the transaction of business at any meeting of the Board of Directors. In the absence of a quorum, a majority of directors present may adjourn the meeting from time to time until a quorum is present. If a quorum is present when a duly called or held meeting is convened, the directors present may continue to transact business until adjournment, even though the withdrawal of a number of directors originally present leaves less than the number otherwise required for a quorum. The Board of Directors shall take action by the affirmative vote of a majority of the directors present at any duly held meeting, except as to any question upon which any different vote is required by law, the Articles of Incorporation, or these Bylaws. A director may give advance written consent or objection to a proposal to be acted upon at a meeting of the Board of Directors. If the proposal acted on at the meeting is substantially the same or has substantially the same effect as the proposal to which the director has consented or objected, such consent or objection shall be counted as a vote for or against the proposal and shall be recorded in the minutes of the meeting. Such consent or objection shall not be considered in determining the existence of a quorum.

3.6 Meeting by Means of Electronic Communication. Members of the Board of Directors of the corporation, or any committee designated by such Board, may participate in a meeting of such Board or committee by means of conference telephone or similar means of communication by which all persons participating in the meeting can simultaneously hear each other, and participation in a meeting pursuant to this section shall constitute presence in person at such meeting.

3.7 Action in Writing. Any action required or permitted to be taken at a meeting of the Board of Directors or of a lawfully constituted committee thereof may be taken by written action signed by all of the directors then in office or by all of the members of such committee, as the case may be. However, if the action does not require shareholder approval and is permitted by the Articles of Incorporation, such action shall be effective if signed by the number of directors or members of such committee that would be required to take the same action at a meeting at which all directors or committee members were present. If any written action is taken by less than all directors or members, all directors or members shall be notified immediately of its text and effective date. The failure to provide such notice, however, shall not invalidate such written action.

3.8 Vacancies. Vacancies on the Board resulting from the death, resignation or removal of a director shall be filled by the affirmative vote of a majority of the remaining directors, even though less than a quorum. Any newly created directorship resulting from an increase in the authorized number of directors by action of the Board of Directors shall be filled by a majority vote of directors serving at the time of such increase. Any director elected under this Section shall hold office for such term as established by the Board and until a successor is duly elected and qualified, unless a prior vacancy occurs by reason of death, resignation, or removal from office.

3.10 Removal of Directors. Removal of a director from office (including a director named by the Board of Directors to fill a vacancy or newly created directorship), with or without cause, shall require the affirmative vote of not less than fifty-one percent (51%) of the votes entitled to be cast by the holders of all then outstanding shares of voting stock, voting together as a single class.

3.9 Committees. The Board of Directors, by a resolution approved by the affirmative vote of a majority of the directors then holding office, may establish one or more committees of one or more persons having the authority of the Board of Directors in the management of the business of the corporation to the extent provided in such resolution. Such committees, however, shall at all times be subject to the direction and control of the Board of Directors. Committee members need not be directors and shall be appointed by the affirmative vote of a majority of the directors present. A majority of the members of any committee shall constitute a quorum for the transaction of business at a meeting of any such committee. In other matters of procedure the provisions of these Bylaws shall apply to committees and the members thereof to the same extent they apply to the Board of Directors and directors, including, without limitation, the provisions with respect to meetings and notice thereof, absent members, written actions, and valid acts. Each committee shall keep regular minutes of its proceedings and report the same to the Board of Directors.

ARTICLE 4
Officers

4.1 Number. The officers of the corporation shall be appointed by the Board of Directors, and shall include a Chief Executive Officer, Chief Financial Officer and Secretary. The Board may also appoint any other officers it deems necessary for the operation and management of the corporation, each of whom shall have the powers, rights, duties, responsibilities and terms of office determined by the Board from time to time. Any number of offices or functions of those offices may be held or exercised by the same person. Officers must be natural persons, and they may be, but need not be, directors of the corporation.

4.2 Term of Office; Removal; Vacancies. An officer shall hold office until a successor shall have been duly appointed and qualified, or until the officer's prior death, resignation or removal. Any officer or agent elected or appointed by the Board of Directors shall hold office at the pleasure of the Board of Directors and may be removed, with or without cause, at any time by the vote of a majority of the Board of Directors. Any vacancy in an office of the corporation shall be filled by action of the Board of Directors.

4.3 Chief Executive Officer. Unless provided otherwise by a resolution adopted by the Board of Directors, the Chief Executive Officer shall have general active management of the business of the corporation, in the absence of the Chairperson of the Board or if the office of Chairperson of the Board is vacant, shall preside at meetings of the shareholders and Board of Directors, shall see that all orders and resolutions of the Board of Directors are carried into effect, shall sign and deliver in the name of the corporation any deeds, mortgages, bonds, contracts, or other instruments pertaining to the business of the corporation, except in cases in which the authority to sign and deliver is required by law to be exercised by another person or is expressly delegated by the Articles of Incorporation, these Bylaws, or the Board of Directors to some other officer or agent of the corporation, may maintain records of and certify proceedings of the Board of Directors and shareholders, and shall perform such other duties as may from time to time be prescribed by the Board of Directors.

4.4 Chief Financial Officer. Unless provided otherwise by a resolution adopted by the Board of Directors, the Chief Financial Officer shall keep accurate financial records for the corporation, shall deposit all monies, drafts, and checks in the name of and to the credit of the corporation in such banks and depositories as the Board of Directors shall designate from time to time, shall endorse for deposit all notes, checks, and drafts received by the corporation as ordered by the Board of Directors, making proper vouchers therefore, shall disburse corporate funds and issue checks and drafts in the name of the corporation as ordered by the Board of Directors, shall render to the Chief Executive Officer and the Board of Directors, whenever requested, an account of all such officers' transactions as Chief Financial Officer and of the financial condition of the corporation, and shall perform such other duties as may be prescribed by the Board of Directors or the Chief Executive Officer from time to time.

4.5 Secretary. The Secretary shall attend all meetings of the Board of Directors and of the shareholders and shall maintain records of, and whenever necessary, certify all proceedings of the Board of Directors and of the shareholders. The Secretary shall keep the stock transfer register of the corporation, when so directed by the Board of Directors or other person or persons authorized to call

such meetings, shall give or cause to be given notice of meetings of the shareholders and of meetings of the Board of Directors, and shall also perform such other duties and have such other powers as the Chief Executive Officer or the Board of Directors may prescribe from time to time.

4.6 Chairperson of the Board. The Board of Directors may elect a Chairperson of the Board who, if elected, shall preside at all meetings of the shareholders and of the Board of Directors and shall perform such other duties as may be prescribed by the Board of Directors from time to time.

4.7 President. Unless otherwise determined by the Board of Directors, the Chief Executive Officer shall be the President of the corporation. If an officer other than the Chief Executive Officer is designated President, the President shall have such powers and perform such duties as the Board of Directors or the Chief Executive Officer may prescribe from time to time.

4.8 Treasurer. Unless otherwise determined by the Board of Directors, the Chief Financial Officer shall be the Treasurer of the corporation. If an officer other than the Chief Financial Officer is designated Treasurer, the Treasurer shall have such powers and perform such duties as the Chief Executive Officer or the Board of Directors may prescribe from time to time.

4.9 Vice Presidents. The Vice President, if any, or Vice Presidents in the case there be more than one, shall have such powers and perform such duties as the Chief Executive Officer or the Board of Directors may prescribe from time to time. In the absence of the Chief Executive Officer, or in the event of the Chief Executive Officer's death, inability, or refusal to act, the Vice President, or in the event there would be more than one Vice President, the Vice Presidents in order designated by the Board of Directors, or in the absence of any designation, in the order of their election, shall perform the duties of the Chief Executive Officer, and when so acting, shall have all the powers of and be subject to all of the restrictions upon the Chief Executive Officer.

4.10 Delegation of Authority. Unless prohibited by a resolution approved by the affirmative vote of a majority of the directors present, an officer appointed by the Board may delegate some or all of the duties or powers of his or her office to other persons, provided that such delegation is in writing.

ARTICLE 5
Shares and Their Transfer

5.1 Certificates for Shares. All shares of the corporation shall be represented by certificates. Each certificate shall contain on its face (i) the name of the corporation, (ii) a statement that the corporation is incorporated under the laws of the State of Minnesota, (iii) the name of the person to whom it is issued, and (iv) the number and class of shares, and the designation of the series, if any, that the certificate represents. Certificates shall also contain any other information required by law or desired by the Board of Directors, and shall be in such form as shall be determined by the Board of Directors. Such certificates shall be signed by the Chief Executive Officer and Secretary, or by any other officer or agent of the corporation designated by resolution of the Board of Directors. All certificates for shares shall be consecutively numbered or otherwise identified. The name and address of the person to whom the shares represented thereby are issued with the number of shares and date of issue shall be entered on the stock transfer books of the

corporation. All certificates surrendered to the corporation or the transfer agent for transfer shall be cancelled and no new certificate shall be issued until the former certificate for a like number of shares shall have been surrendered and cancelled.

5.2 Transfer of Shares. Transfer of shares of the corporation shall be made only on the stock transfer books of the corporation by the holder of record thereof or by such holder's legal representative, who shall furnish proper evidence of authority to transfer, or by such holder's attorney thereunto authorized by power of attorney duly executed and filed with the Secretary of the corporation, and on surrender of such shares to the corporation or the transfer agent of the corporation. The corporation may treat, as the absolute owner of shares of the corporation, the person or persons in whose name or names the shares are registered on the books of the corporation.

5.3 Lost Certificates. Any shareholder claiming that a certificate for shares has been lost, destroyed or stolen shall make an affidavit of that fact in such form as the Board of Directors shall require and shall, if the Board of Directors so requires, give the corporation a sufficient indemnity bond, in form, in an amount, and with one or more sureties satisfactory to the Board of Directors, to indemnify the corporation against any claims which may be made against it on account of the reissue of such certificate. A new certificate shall then be issued to such shareholder for the same number of shares as the one alleged to have been destroyed, lost or stolen.

ARTICLE 6
Miscellaneous

6.1 Indemnification. Pursuant to obligations, limitations and procedures provided under Minnesota Statutes Section 302A.521, the corporation shall indemnify any director, officer or employee who is made or threatened to be made a party to a proceeding by reason of the former or present official capacity of the person against judgments, penalties, fines, including, without limitation, excise taxes assessed against the person with respect to an employee benefit plan, settlements, and reasonable expenses, including attorneys" fees and disbursements, incurred by the person in connection with the proceeding, if, with respect to the acts or omissions of the person complained of in the proceeding, the person:

(1) has not been indemnified by another organization or employee benefit plan for the same judgments, penalties, fines, including, without limitation, excise taxes assessed against the person with respect to an employee benefit plan, settlements, and reasonable expenses, including attorneys' fees and disbursements, incurred by the person in connection with the proceeding with respect to the same acts or omissions;

(2) acted in good faith;

(3) received no improper personal benefit and Minnesota Statutes Section 302A.255 (which provides procedures to be followed in the event of certain conflicts of interest), if applicable, has been satisfied;

(4) in the case of a criminal proceeding, had no reasonable cause to believe the conduct was unlawful; and

(5) in the case of:

(i) a director, officer or employee of the corporation, reasonably believed that the conduct was in the best interests of the corporation, or

(ii) a director, officer, or employee who, while a director, officer or employee of the corporation, is or was serving at the request of the corporation or whose duties in that position involve or involved service as a trustee of an employee benefit plan, reasonably believed that the conduct was in the best interests of the participants or beneficiaries of the plan or not otherwise opposed to the best interests of the corporation, or

(ii) a director, officer, or employee who, while a director, officer or employee of the corporation, is or was serving at the request of the corporation or whose duties in that position involve or involved service as a director, officer, partner, trustee, employee, or agent of another organization, reasonably believed that the conduct was not opposed to the best interests of the corporation.

6.2 Contracts; Checks and Drafts. The Board of Directors may authorize such officers or agents as they shall designate to enter into contracts or execute and deliver instruments in the name of and on behalf of the corporation, and such authority may be general or confined to specific instances. All checks, drafts or other orders for the payment of money, notes, or other evidences of indebtedness issued in the name of the corporation shall be signed by such officers or agents of the corporation as shall be designated and in such manner as shall be determined from time to time by resolution of the Board of Directors.

6.3 Loans. The corporation shall not lend money to, guaranty the obligation of, become a surety for, or otherwise financially assist any person unless the transaction has been approved by the affirmative vote of a majority of directors present at a duly called meeting, and (i) is in the usual and regular course of business of the corporation, (ii) is with, or for the benefit of, a related corporation, an organization in which the corporation has a financial interest, an organization with which the corporation has a business relationship, or an organization to which the corporation has the power to make donations, (iii) is with, or for the benefit of, an officer or other employee of the corporation or a subsidiary, including an officer or employee who is a director of the corporation or a subsidiary, and may reasonably be expected, in the judgment of the Board of Directors, to benefit the corporation, or (iv) has been approved by the affirmative vote of the holders of two-thirds of the outstanding shares, including both voting and non-voting shares.

6.4 Dividends. The Board of Directors from time to time may declare, and the corporation may pay, dividends on its outstanding shares in the manner and upon the terms and conditions provided by law.

6.5 Reserves. There may be set aside out of any funds of the corporation available for dividends such sum or sums as the Board of Directors from time to time, in its absolute discretion, deems proper as a reserve or reserves to meet contingencies, for equalizing dividends, for repairing or maintaining any property of the corporation, for the purchase of additional property, or for such other purpose as the directors shall deem to be consistent with the interests of the corporation. The Board of Directors may modify or abolish any such reserve.

6.6 Fiscal Year. The fiscal year of the corporation shall be determined by resolution of the Board of Directors.

6.7 Amendments. Except as limited by the Articles of Incorporation, these Bylaws may be altered or amended by the Board of Directors. Notwithstanding any other provisions of these Bylaws (and notwithstanding the fact that a lesser percentage of separate class vote may be specified by law), the affirmative vote of the holders of not less than fifty-one percent (51%) of the votes entitled to be cast by the holders of all then outstanding shares of voting stock, voting together as a single class, shall be required to amend or repeal, or adopt any provisions inconsistent with Article 3.

6.7 Shareholder Agreements. In the event of any conflict or inconsistency between these Bylaws, or any amendment thereto, and the terms of any shareholder control agreement as defined in Minnesota Statutes Section 302A.457, whenever adopted, the terms of such shareholder control agreement shall control.

* * * * *

The undersigned, Secretary of Entegris, Inc., a Minnesota corporation, does hereby certify that the foregoing Bylaws were adopted by the Board of Directors on January 20, 2004.

January 20, 2004

/s/ John Villlas

John Villas, Secretary

Exhibit 10.3

ENTEGRIS, INC.
1999 LONG-TERM INCENTIVE AND
STOCK OPTION PLAN

1. **Purpose.** The purpose of the Plan is to provide incentives to attract, retain and motivate eligible persons whose present and potential contributions are important to the success of the Company, its Subsidiaries and Affiliates, by offering them an opportunity to participate in the Company's future performance through grants of Options and Awards. Capitalized terms not defined in the text are defined in Section 23.

2. **Types of Stock Options and Awards.**

2.1 Options and Shares. Options granted under this Plan may be either: (a) incentive stock options ("ISOs") within the meaning of Section 422 of the Revenue Code, or (b) nonqualified stock options ("NSOs"), as designated at the time of grant. The Shares that may be purchased upon exercise of Options granted under this Plan are shares of the Company's Common Stock, $.01 par value per share.

2.2 Awards. Awards granted under this Plan include Performance Awards (denominated or payable in cash, Shares, other securities and other awards or other property) and Restricted Stock Awards, as designated at the time of grant.

3. **Shares Subject to The Plan.**

3.1 Number of Shares Available. Subject to Section 3.2, the total number of Shares reserved and available for grant and issuance pursuant to the Plan shall be initially nine million (9,000,000) Shares. Such Shares may be either authorized but unissued shares, or issued shares which have been reacquired by the Company. Subject to Section 3.2, Shares shall again be available for grant and issuance in connection with future Options or Awards under the Plan that: (a) are subject to issuance upon exercise of an Option but cease to be subject to such Option for any reason other than exercise of such Option; (b) are subject to an Option or Award granted hereunder but are forfeited or are repurchased by the Company at the original issue price; or (c) are subject to an Option or Award that otherwise terminates without Shares being issued. The Committee shall have the authority to replenish the Plan annually with additional Shares by electing to increase the number of Shares available for issuance under the Plan by up to four percent (4%) of the total outstanding Shares of the Company, such election to be made within ninety (90) days after the end of the fiscal year; provided, however, that the total number of Shares reserved and available for grant pursuant to the Plan shall not exceed twenty million (20,000,000) Shares. At all times during the term of this Plan, the Company shall reserve and keep available such number of Shares as shall be required to satisfy the requirements of outstanding Options and Awards under this Plan.

3.2 Adjustment of Shares. In the event that the number of outstanding Shares change as a result of a stock dividend, recapitalization, stock split, reverse stock split, subdivision, combination, reclassification or similar change in the capital structure of the Company without consideration, then: (a) the number of Shares reserved for issuance under this Plan; (b) the Exercise Prices of and number of Shares subject to outstanding Options; (c) the number of Shares and price per Share subject to outstanding Awards; and (iv) the amount payable in connection with Awards, shall be proportionately adjusted, subject to any required action by the Board or the shareholders of the Company and in compliance with applicable securities laws; provided, however, that fractions of a Share shall not be issued but shall either be paid in cash at Fair Market Value or shall be rounded up to the nearest Share, as determined by the Committee; and provided further that the Exercise Price of any Option may not be decreased to below the par value of the Shares.

4. **Eligibility.** ISOs may be granted only to employees (including officers and directors who are also employees) of the Company or of a Subsidiary of the Company.

All other Options and Awards may be granted to employees, officers, directors, consultants, independent contractors and advisors of the Company or any Subsidiary or Affiliate of the Company; provided, however, that such consultants, independent contractors and advisors render bona fide services not in connection with the offer and sale of securities in a capital-raising transaction. A person may be granted more than one Option and/or Award under the Plan. The Company also may, from time to time and in the manner determined by the Committee, substitute or assume outstanding options or performance or restricted stock awards granted by another company, whether in connection with an acquisition of such other company or otherwise.

5. **Administration.**

5.1 Committee Authority. This Plan shall be administered by the Committee or the Board acting as the Committee. Subject to the general purposes, terms and conditions of this Plan, and to the direction of the Board, the Committee shall have full power to implement and carry out this Plan. The Committee shall have the authority to:

(a) Construe and interpret the Plan, any Option Agreement or Award Agreement and any other agreement or document executed pursuant to this Plan.

(b) Prescribe, amend and rescind rules and regulations relating to this Plan.

(c) Select persons to receive Options or Awards.

(d) Determine the form and terms of Options and Awards.

(e) Determine the number of Shares or other consideration subject to Options and Awards.

(f) Determine whether Options and Awards will be granted singly, in combination, in tandem with, in replacement of or as alternatives to, other Options and/or Awards under this Plan or any other incentive or compensation plan of the Company or any Subsidiary or Affiliate of the Company.

(g) Grant waivers of Plan, Option or Award conditions.

(h) Determine the vesting, exercisabilty and payment of Options and Awards.

(i) Correct any defect, supply any omission, or reconcile inconsistency in the Plan, any Option, any Option Agreement or Award Agreement.

(j) Determine whether an Option or Award has been earned.

(k) Make all other determinations necessary or advisable for the administration of this Plan.

5.2 Committee Discretion. Any determination made by the Committee with respect to any Option or Award shall be made in its sole discretion at the time of grant of the Option or the Award or, unless in contravention of any express term of this Plan or the Option/Award, at any later time, and such determination shall be final and binding on the Company and all persons having an interest in any Option or Award under this Plan.

5.3 Exchange Act Requirements. If the Company is subject to the Exchange Act, the Company will take appropriate steps to comply with the disinterested director requirements of Section 16(b) of the Exchange Act, including but not limited to, the appointment by the Board of a Committee consisting of not less than two Persons (who are members of the Board), each of whom is a Disinterested Person.

6. **Terms and Conditions of Options.** The Committee may grant Options to eligible persons and shall determine whether such Options shall be ISOs within the meaning of the Revenue Code or NSOs, the number of Shares subject to such Options, the Exercise Price of such Options, the period during which such Options may be exercised, and all other terms and conditions of such Options, subject to the following:

6.1 Form of Option Grant. Each Option granted under this Plan shall be evidenced by an Option Agreement which shall expressly identify the Option as an ISO or NSO, and be in such form and contain such provisions (which need not be the same for each Participant) as the Committee shall from time to time approve, and which shall comply with and be subject to the terms and conditions of this Plan.

6.2 Date of Grant. The date of grant of an Option shall be the date on which the Committee makes the determination to grant such Option unless otherwise specified by the Committee.

6.3 Exercise Period. Options shall be exercisable within the times or upon the events determined by the Committee as set forth in the Option Agreement; provided, however, that no ISO shall be exercisable after the expiration of ten (10) years from the date the Option is granted; and provided further that no ISO granted to a person who directly or by attribution owns more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Subsidiary of the Company (a "Ten Percent Shareholder") shall be exercisable after the expiration of five (5) years from the date the ISO is granted.

6.4 Exercise Price. The Exercise Price shall be determined by the Committee when the Option is granted, provided, however, that: (a) the Exercise Price of an ISO shall be not less than one hundred percent (100%) of the Fair Market Value of the Shares on the date of grant; (b) the Exercise Price of any ISO granted to a Ten Percent Shareholder shall not be less than one hundred ten percent (110%) of the Fair Market Value of the Shares on the date of grant; and (c) the Exercise Price of any Option may not be decreased to below the par value of the Shares, if any.

6.5 Method of Exercise. Options may be exercised only by delivery to the Company of a written stock option exercise agreement (the "Exercise Agreement") in a form approved by the Committee (which need not be the same for each Participant), together with payment in full of the Exercise Price for the number of Shares being purchased.

6.6 Limitations on ISOs. The aggregate Fair Market Value (determined as of the date of grant) of Shares with respect to which ISOs are exercisable for the first time by a Participant during any calendar year (under this Plan or under any other incentive stock option plan of the Company or any Subsidiary or Affiliate of the Company) shall not exceed One Hundred Thousand Dollars ($100,000). If the Fair Market Value of Shares on the date of grant with respect to which ISOs are exercisable for the first time by a Participant during any calendar year exceeds One Hundred Thousand Dollars ($100,000), the Options for the first One Hundred Thousand Dollars ($100,000) worth of Shares to become exercisable in such calendar year shall be ISOs and the Options for the amount in excess of One Hundred Thousand Dollars ($100,000) that become exercisable in that calendar year shall be NSOs. In the event that the Revenue Code or the regulations promulgated thereunder are amended after the Effective Date of the Plan to provide for a different limit on the Fair Market Value of Shares permitted to be subject to ISOs, such different limit shall be automatically incorporated herein and shall apply to any Options granted after the effective date of such amendment.

6.7 Modification, Extension or Renewal. The Administrator may modify, extend or renew outstanding Options and authorize the grant of new Options in substitution thereof, provided that any such action may not, without the written consent of the Eligible Director, impair any of the Eligible Director's rights under any Option previously granted. Except for adjustments made pursuant to Section 3.2, an outstanding option granted under this Plan shall not be repriced. Accordingly, the Exercise Price for any outstanding Option may not be decreased after the date of grant, nor may any outstanding option granted under the Plan be surrendered to the Company as consideration for the grant of a new option with a lower Exercise Price, as the case may be, without shareholder approval of any such action.

6.8 No Disqualification. Notwithstanding any other provision in this Plan, no term of this Plan relating to ISOs shall be interpreted, amended or altered, nor shall any discretion or authority granted under this Plan be exercised, so as to disqualify this Plan under Section 422 of the Revenue Code or, without the consent of the Participant affected, to disqualify any ISO under Section 422 of the Revenue Code.

7. **Payment For Shares Purchased Upon The Exercise of Options.** Payment for Shares upon the exercise of Options may be made in cash or by check or, or in any other manner approved for the Participant by the Committee and where permitted by Section 16(b) of the Exchange Act or other applicable law including, but not limited to, cancellation of indebtedness, payment by a promissory note, waiver of compensation, the surrender of other Company shares, or a cashless exercise through the surrender of a portion of the Option.

8. **Withholding Taxes.** Whenever Shares and/or other property are to be issued upon exercise of Options or Awards granted under this Plan, the Company may require the Participant to remit to the Company an amount sufficient to satisfy federal, state and local withholding tax requirements prior to the delivery of any certificate or certificates for such Shares. Whenever, under this Plan, payments in satisfaction of Options or Performance Awards are to be made in cash, such payment shall be net of an amount sufficient to satisfy federal, state and local withholding tax requirements.

9. **Restricted Stock Awards.** Awards of Shares subject to forfeiture and transfer restrictions may be granted by the Committee. Any Restricted Stock Award shall be evidenced by a Restricted Stock Award Agreement in such form as the Committee shall from time to time approve, which agreement shall comply with and be subject to the following terms and conditions and any additional terms and conditions established by the Committee that are consistent with the terms of the Plan.

9.1 Grant of Restricted Stock Awards. Each Restricted Stock Award made under the Plan shall be for such number of Shares as shall be determined by the Committee and set forth in the Restricted Stock Award Agreement containing the terms of such Restricted Stock Award. The Restricted Stock Award Agreement shall set forth a period of time during which the grantee must remain in the continuous employment of the Company in order for the forfeiture and transfer restrictions to lapse. If the Committee so determines, the restrictions may lapse during such restricted period in installments with respect to specified portions of the Shares covered by the Restricted Stock Award. The Restricted Stock Award Agreement may also, in the discretion of the Committee, set forth performance or other conditions that will subject the Shares to forfeiture and transfer restrictions. The Committee may, at its discretion, waive all or any part of the restrictions applicable to any or all outstanding Restricted Stock Awards.

9.2 Delivery of Shares and Restrictions. At the time of a Restricted Stock Award, a certificate representing the number of Shares awarded thereunder shall be registered in

the name of the Participant. Such certificate shall be held by the Company or any custodian appointed by the Company for the account of the Participant subject to the terms and conditions of this Plan and the grant or award, and shall bear such a legend setting forth the restrictions imposed thereon as the Committee, in its discretion, may determine. The Participant shall have all rights of a shareholder with respect to the Shares, including the right to receive dividends and the right to vote such Shares, subject to the following restrictions: (i) the Participant shall not be entitled to delivery of the stock certificate until the expiration of the restricted period and the fulfillment of any other restrictive conditions set forth in the Restricted Stock Award Agreement with respect to such Shares; (ii) none of the Shares may be sold, assigned, transferred, pledged, hypothecated or otherwise encumbered or disposed of during such restricted period or until after the fulfillment of any such other restrictive conditions; and (iii) except as otherwise determined by the Committee, all of the Shares shall be forfeited and all rights of the grantee to such Shares shall terminate, without further obligation on the part of the Company, unless the Participant remains in the continuous employment of the Company for the entire restricted period in relation to which such Shares were granted and unless other restrictive conditions relating to the Restricted Stock Award are met. Any Common Stock, any other securities of the Company and any other property (except for cash dividends) distributed with respect to the Shares subject to Restricted Stock Awards shall be subject to the same restrictions, terms and conditions as such restricted Shares.

9.3 Termination of Restrictions. At the end of the restricted period and provided that any other restrictive conditions of the Restricted Stock Award are met, or at such earlier time as otherwise determined by the Committee, all restrictions set forth in the Restricted Stock Award Agreement relating to the Restricted Stock Award or in this Plan shall lapse as to the Restricted Shares subject thereto, and a stock certificate for the appropriate number of Shares, free of the restrictions and the restricted stock legend, shall be delivered to the Participant or the Participant's beneficiary or estate, as the case my be.

10. **Performance Awards.**

10.1 Grant of Performance Awards. The Committee is further authorized to grant Performance Awards. Subject to the terms of this Plan and any applicable award agreement, a Performance Award granted under this Plan: (i) may be denominated or payable in cash, Shares (including without limitation, restricted stock), other securities, other awards or other property; and (ii) shall confer on the Participant rights valued as determined by the Committee, in its discretion, and payable to, or exercisable by, the Participant, in whole or in part, upon the achievement of such performance goals during such performance periods as the Committee, in its discretion, shall establish. Subject to the terms of this Plan and any applicable award agreement, the performance goals to be achieved during any performance period, the length of any performance period, the amount of any Performance Award granted, and the amount of any payment or transfer to be made by the Participant and by the Company under any Performance Award shall be determined by the Committee.

10.2 Shares Subject to Performance Awards. For purposes of this Section 10: (i) if a Performance Award entitles the Participant to receive or purchase Shares, the number of Shares covered by such Performance Award to which such Performance Award relates shall be counted on the date of grant of such Performance Award against the aggregate number of Shares available under this Plan; and (ii) if a Performance Award entitles the Participant to receive cash payments but the amount of such payments are denominated in or based on a number of Shares, the number of Shares shall be counted on the date of grant of such Performance Award against the aggregate number of shares available under this Plan; provided, however, that Performance Awards that operate in tandem with (whether granted simultaneously with or at a different time from), or that are substituted for, other Performance Awards may be counted or not counted under procedures adopted by the Committee in order to avoid double counting.

11. **Privileges of Stock Ownership.** No Participant shall have any of the rights of a shareholder with respect to any Shares until the Shares are issued to the Participant.

12. **Transferability.** Options and Awards granted under this Plan, and any interest therein, shall not be transferable or assignable by a Participant, and may not be made subject to execution, attachment or similar process, otherwise than by will or by the laws of descent and distribution or pursuant to a qualified domestic relations order as defined by the Revenue Code or Title I of the Employee Retirement Income Security Act (or the rules thereunder). During the lifetime of the Participant an Option or Award shall be exercisable only by the Participant, and any elections with respect to an Option or Award may be made only by the Participant.

13. **Restrictions on Shares.** At the discretion of the Committee, the Company may require that an Option or Award be subject to restrictions including, but not limited to, a right of first refusal or a right to repurchase by the Company.

14. **Certificates.** All certificates for Shares or other securities delivered under this Plan shall be subject to such stock transfer orders, legends and other restrictions as the Committee may deem necessary or advisable, including restrictions under any applicable federal, state or foreign securities law, or any rules, regulations and other requirements of the SEC or any stock exchange or automated quotation system upon which the Shares may be listed.

15. **Escrow; Pledge of Shares.** To enforce any restrictions on a Participant's Shares, and/or to enforce any obligation of a Participant in connection with an Option or Award the Committee may require the Participant to deposit all certificates representing Shares, together with stock powers or other instruments of transfer approved by the Committee, appropriately endorsed in blank, with the Company or an agent designated by the Company to hold in escrow until such restrictions have lapsed or terminated, and the Committee may cause a legend or legends referencing such restrictions to be placed on the certificates.

16. **Securities Laws and Other Regulatory Compliance.** An Option or Award shall not be effective unless such Option or Award is in compliance with all applicable federal and state securities laws, rules and regulations of any governmental body, and the requirements of any stock exchange or automated quotation system upon which the Shares may then be listed, as

they are in effect on the date of grant of the Option or Award and also on the date of exercise or other issuance of Shares. Notwithstanding any other provision in this Plan, the Company shall have no obligation to issue or deliver certificates for Shares under this Plan prior to: (a) obtaining any approvals from governmental agencies that the Company determines are necessary or advisable and/or (b) completion of any registration or other qualification of such Shares under any state or federal law or ruling of any governmental body that the Company determines to be necessary or advisable. The Company shall be under no obligation to register the Shares with the SEC or to effect compliance with the registration, qualification or listing requirements of any state securities laws, stock exchange or automated quotation system, and the Company shall have no liability for any inability or failure to do so.

17. **No Obligation to Employ.** Nothing in this Plan or any Option or Award granted under this Plan shall confer or be deemed to confer on any Participant any right to continue in the employ of or to continue any other relationship with, the Company or any Subsidiary or Affiliate of the Company or limit in any way the right of the Company or any Subsidiary or Affiliate of the Company to terminate the Participant's employment or other relationship at any time, with or without cause.

18. **Adoption and Shareholder Approval.** This Plan shall become effective on the date that it is adopted by the Board. This Plan shall be approved by the shareholders of the Company (excluding Shares issued pursuant to this Plan), consistent with applicable laws, within twelve (12) months before or after the Effective Date.

19. **Term of Plan.** This Plan shall terminate ten (10) years from the Effective Date or, if earlier, the date of shareholder approval.

20. **Amendment or Termination of This Plan.** The Board may at any time terminate or amend this Plan in any respect, including, without limitation, amendment of any form of Option Agreement or Award Agreement or instrument to be executed pursuant to the Plan; provided, however, that the Board shall not, without the approval of the shareholders of the Company, amend the Plan in any manner that requires such shareholder approval pursuant to the Revenue Code or the regulations promulgated thereunder as such provisions apply to ISO plans or pursuant to the Exchange Act or Rule 16b-3 (or its successor), as amended, thereunder.

21. **Nonexclusivity of This Plan.** Neither the adoption of this Plan by the Board, the submission of this Plan to the shareholders of the Company for approval nor any provision of this Plan shall be construed as creating any limitations on the power of the Board to adopt such additional compensation arrangements as it may deem desirable including, without limitation, the granting of stock options or awards otherwise than under this Plan, and such arrangements may be either generally applicable or applicable only in specific cases.

22. **Governing Law.** This Plan and all agreements, documents and instruments entered into pursuant to this Plan shall he governed by and construed in accordance with the internal laws of the State of Minnesota, excluding that body of law pertaining to conflict of law or choice of law.

23. **Definitions.** As used in this Plan, the following terms shall have the following meanings:

"Affiliate" means any corporation that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, another corporation, where "control" (including the terms "controlled by" and "under common control with") means the possession, direct or indirect, of the power to cause the detection of the management and policies of the corporation, whether through the ownership of voting securities, by contract or otherwise.

"Award" means either a Performance Award or Restricted Stock Award granted under this Plan, or both, as the context requires.

"Award Agreement" means either a Performance Award Agreement or Restricted Award Agreement granted under this Plan, or both, as the context requires.

"Board" means the Board of Directors of the Company.

"Committee" means the committee appointed by the Board to administer this Plan, or if no committee is appointed, the Board.

"Company" means Entegris, Inc., a corporation organized under the laws of the State of Minnesota, or any successor corporation.

"Disability" means a disability, whether temporary or permanent, partial or total, within the meaning of Section 22(e)(3) of the Revenue Code, as determined by the Committee.

"Disinterested Person" means a director who has not, during the period that person is a member of the Committee and for one year prior to service as a member of the Committee, been granted or optioned equity securities pursuant to the Plan or any other plan of the Company or any Subsidiary or Affiliate of the Company, except in accordance with the requirements set forth in Rule l6b-3(c)(2)(i) (and any successor regulation thereto) as promulgated by the SEC under Section 16(b) of the Exchange Act, as such rule is amended from time to time and as interpreted by the SEC.

"Effective Date" means the date on which the Board adopts this Plan.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Exercise Price" means the price at which a holder of an Option may purchase the Shares issuable upon exercise of the Option.

"Fair Market Value" means, as of any date, the value of a Share of the Company's Common Stock determined as follows:

(a) If such Common Stock is then quoted on the Nasdaq National Market System, its last reported sale price on the Nasdaq National Market System or, if no such reported sale takes place on such date, the average of the closing bid and asked prices.

(b) If such Common Stock is publicly traded and is then listed on a national securities exchange, the last reported sale price or, if no such reported sale takes place on such date, the average of the closing bid and asked prices on the principal national securities exchange on which the Common Stock is listed or admitted to trading.

(c) If such Common Stock is publicly traded but is not quoted on the Nasdaq National Market System nor listed or admitted to trading on a national securities exchange, the average of the closing bid and asked prices on such date, as reported by The Wall Street Journal, for the over-the-counter market.

(d) If none of the foregoing is applicable, by the Board of Directors of the Company in good faith.

"Insider" means an officer or director of the Company or any other person whose transactions in the Company's Common Stock are subject to Section 16 of the Exchange Act.

"Option" means a contractual right to purchase Shares at sometime in the future at a specified price.

"Option Agreement" means, with respect to each Option, the signed written agreement between the Company and the Participant setting forth the terms and conditions of the Option.

"Participant" means a person who receives an Option or Award under this Plan.

"Performance Award" means an award of cash, Shares or other property payable upon the achievement of specific performance goals.

"Performance Award Agreement" means, with respect to each Performance Award, the signed written agreement between the Company and the Participant setting forth the terms and conditions of the Performance Award.

"Plan" means this Entegris, Inc. 1999 Long-Term Incentive and Stock Option Plan, as amended from time to time.

"Restricted Stock Award" means an award of Shares subject to forfeiture and transfer restrictions as determined by the Committee.

"Restricted Stock Award Agreement" means, with respect to each Restricted Stock Agreement, the signed written agreement between the Company and the Participant setting forth the terms and conditions of the Restricted Stock Award.

"Revenue Code" means the Internal Revenue Code of 1986, as amended.

"SEC" means the Securities and Exchange Commission.

"Securities Act" means the Securities Act of 1933, as amended.

"Shares" mean shares of the Company's Common Stock, $.01 par value per share, reserved for issuance under this Plan, as adjusted pursuant to Sections 3 and 18 and any successor security.

"Subsidiary" means any corporation (other than the Company) in an unbroken chain of corporations beginning with the Company if, at the time of granting of the Option, each of the corporations other than the last corporation in the unbroken chain owns stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

ENTEGRIS, INC.
OUTSIDE DIRECTORS' OPTION PLAN

1) **Definitions.** As used in this Plan, the following terms have the following meanings:

(a) "Administrator" means the Board or a committee appointed by the Board.

(b) "Affiliate" means a "parent" or "subsidiary" corporation, as defined in Sections 425(e) and 425(f), respectively, of the Code.

(c) "Board" means the Board of Directors of the Company.

(d) "Code" means the Internal Revenue Code of 1986, as amended.

(e) "Company" means Entegris, Inc., a Minnesota corporation.

(f) "Director" means a member of the Board.

(g) "Effective Date" means the date this Plan is approved by the Company's stockholders.

(h) "Eligible Director" means a Director who is not also an employee of the Company or of an Affiliate.

(i) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(j) "Grant Date" means the date on which an Option is granted.

(k) "Option" means an option to purchase stock as described in Section 5(a) hereof. An Option granted under this Plan is a nonstatutory option to purchase Stock which does not meet the requirements set forth in Section 422 of the Code.

(l) "Option Agreement" means a written agreement evidencing an Option, in form satisfactory to the Company, duly executed on behalf of the Company and delivered to and executed by an Optionee.

(m) "Optionee" means an Eligible Director who has been granted an Option.

(n) "Plan" means this Entegris, Inc. Outside Directors' Option Plan.

(o) "Restricted Stock Award" means an award of shares of the Company's Stock subject to forfeiture and transfer restrictions as determined by the Administrator, evidenced by a signed written agreement between the Company and the Eligible Director setting forth the terms and conditions of the Restricted Stock Award.

(p) "Securities Act" means the Securities Act of 1933, as amended.

(q) “Stock” means the Common Stock, $.01 par value, of the Company.

(r) “Subscription Agreement” means a written agreement, in form satisfactory to the Company, duty executed by the Company and an Optionee who has an Option to purchase Stock.

(s) “Voting Shares” means the outstanding shares of the Company entitled to vote for the election of directors.

2) **Purposes of the Plan.** The purposes of this Plan are to attract and retain the best available candidates for the Board, to provide additional equity incentives to Eligible Directors through their participation in the growth value of the Stock and to promote the success of the Company’s business. To accomplish the foregoing objectives, this Plan provides a means whereby Eligible Directors will receive Options to purchase Stock or Restricted Stock Awards.

3) **Stock Subject to the Plan.** The maximum number of shares of Stock that may be issued pursuant to the Plan upon the exercise of Options or the grant of Restricted Stock Awards is five hundred thousand (500,000). [Note: Due to the Company’s two-for-one stock split effected in March 2000, the number of shares authorized hereunder was automatically increased to 1,000,000.] The shares of Stock covered by the portion of any Option or Restricted Stock Award that expires or otherwise terminates unexercised under this Plan shall become available again for grant. The number of shares of Stock covered by Options or Restricted Stock Awards is subject to adjustment in accordance with Section 5(h).

4) **Administration.** The Administrator shall have the authority to grant Options or Restricted Stock Awards upon the terms and conditions of this Plan, and to determine all other matters relating to this Plan. The Administrator may delegate ministerial duties to such employees of the Company as it deems proper. All questions of interpretation and application of this Plan shall be determined by the Administrator, and such determinations shall be final and binding on all Persons.

5) **Terms and Conditions of Options.**

(a) Grant of Option and Restricted Stock Awards - Options and Restricted Stock Awards shall be granted pursuant to this Plan as follows:

1) Grant on Date of Adoption - On the date that this Plan is adopted by the Company’s Board of Directors, and subject to subsequent shareholder approval, an Option for fifteen thousand (15,000) shares of Stock shall be granted to each Eligible Director.

2) Grant to Directors Joining the Board – Each Outside Director shall be automatically granted an Option (an “Initial Grant”) to purchase 15,000 shares on the date on which such person first becomes a Director, whether through election by the shareholders of the Company or appointment by the Board of Directors.

3) Subsequent Grants – On October 15 of each year or the next trading day thereafter in the event that the market is closed on such date, beginning in 2005, at the election of the Administrator either an Option for nine thousand (9,000) shares of Stock, or a Restricted Stock Award of up to three thousand (3,000) shares, shall be granted to each Eligible Director; provided that such Option or Restricted Stock Award shall only be granted to Outside Directors who will continue to serve after the date of grant of such Option or Restricted Stock Award and who have served continuously since the prior grant of such Option or Restricted Stock Award.

(b) Exercise Price - The exercise price of an Option shall be at least 100% of the value of the Stock on the Grant Date, determined in accordance with Section 6 hereof.

(c) Option Term - Each Option granted under this Plan shall expire ten (10) years from the Grant Date.

(d) Option Exercise -

(1) Replacement Options - On the date of adoption of this Plan by the Company's Board of Directors, Options shall be issued to replace currently outstanding options issued under the Fluoroware, Inc. 1997 Directors Stock Option Plan (the "Fluoroware Director Options"). Such replacement Options shall be identical in all respects to and continue the Fluoroware Director Options which are currently outstanding including, but not limited to, carrying forward the original vesting schedules; provided, however, that the number of shares of Stock and exercise price of each replacement Option shall reflect the conversion ratio set forth in that certain June 1, 1999 Consolidation Agreement by and among Empak, Inc., Fluoroware, Inc. and Entegris, Inc. Those Directors or former Directors of Fluoroware, Inc. who qualify as Eligible Directors hereunder shall be entitled to the additional grants provided for by this Plan, including the grant of 15,000 shares on the date of adoption of this Plan as described in Section 5.a. above.

(2) Exercise - An Option shall be exercisable with respect to one hundred percent (100%) of the Stock six (6) months after the Grant Date, provided that the Optionee has served continuously as a Director of the Company since the Grant Date.

(3) Compliance with Securities Laws - Stock shall not be issued pursuant to the exercise of an Option unless the exercise of the Option and the issuance and delivery of Stock pursuant thereto shall comply with all relevant provisions of law including, without limitation, the Securities Act, the Exchange Act, applicable state securities laws, the rules and regulations promulgated under each of the foregoing, the requirements of the New York Stock Exchange (if the Company's securities are listed thereon) and the requirements of Nasdaq pertaining to the National Market

System (if the Company's are quoted thereon), and shall be further subject to the approval of counsel to the Company with respect to such compliance.

(e) Registration and Resale - If the Stock subject to this Plan is not registered under the Securities Act and under applicable state securities laws, the Administrator may require that the Optionee deliver to the Company such documents as counsel to the Company may determine are necessary or advisable in order to substantiate compliance with applicable securities laws and the rules and regulations promulgated thereunder.

(f) Payment Upon Exercise - At the time written notice of exercise of an Option is given to the Company, the Optionee shall make payment in full, in cash or check or by one of the methods specified below, for all Stock purchased pursuant to the exercise of the Option.

(g) Payment of Exercise Price; Delivery of Stock - An Option may be exercised by any method approved by the Administrator including delivery by the Optionee of Stock already owned by the Optionee for all or part of the aggregate exercise price of the Stock as to which the Option is being exercised, so long as: (i) the value of such Stock (determined as provided in Section 6) is equal on the date of exercise to the aggregate exercise price of the shares of Stock as to which the Option is being exercised, or such portion thereof as the Optionee is authorized to pay by delivery of Stock, and (ii) such previously owned shares have been held by the Optionee for at least six (6) months.

(h) Adjustments - If the Stock is changed by reason of a stock split, reverse stock split, stock dividend or recapitalization, or is converted into or exchanged for other securities, the Administrator shall make such appropriate adjustments in: (i) the number and class of shares of Stock subject to this Plan; (ii) each Option outstanding under this Plan; and (iii) the exercise price of each outstanding Option; provided, however, that the Company shall not be required to issue fractional shares as a result of any such adjustment. Each such adjustment shall be determined by the Administrator in its sole discretion, which determination shall be final and binding on all persons. Any new or additional Stock to which an Optionee may be entitled under this Section 5(h) shall be subject to all of the terms and conditions set forth in Section 5 of this Plan.

(i) No Assignment - No right or benefit under, or interest in, this Plan shall be subject to assignment or transfer (other than by will or the laws of descent and distribution), and no such right, benefit or interest shall be subject to attachment or legal process for or against Optionee or his or her beneficiaries, as the case may be. During the life of the Optionee, an Option shall be exercisable only by the Optionee or, in the event of disability of the Optionee, by the Optionee's guardian or legal representative.

(j) Termination; Expiration of Unvested Options - Options granted to an Optionee under this Plan, to the extent such rights have not expired or been exercised, shall terminate on the date set forth in the Stock Option Agreement.

(k) Restricted Stock Awards. At the time of a Restricted Stock Award, a certificate representing shares of the Company's Stock awarded thereunder shall be registered in the name of the Eligible Director. Such certificate shall be held by the Company or any custodian appointed by the Company for the account of the Eligible Director subject to the terms and conditions of this Plan and the award, and shall bear such a legend setting forth the restrictions imposed thereon as the Administrator, in its discretion, may determine. The Eligible Director shall have all rights of a shareholder with respect to the shares, including the right to receive dividends and the right to vote such shares, subject to the following restrictions: (i) the Eligible Director shall not be entitled to delivery of the stock certificate until the expiration of the restricted period and the fulfillment of any other restrictive conditions set forth in the Restricted Stock Award Agreement with respect to such shares; (ii) none of the shares may be sold, assigned, transferred, pledged, hypothecated or otherwise encumbered or disposed of during such restricted period or, if later, until after the fulfillment of any such other restrictive conditions; and (iii) except as otherwise determined by the Administrator, all of the shares shall be forfeited and all rights of the grantee to such shares shall terminate, without further obligation on the part of the Company, unless the Eligible Director serves continuously for the entire restricted period in relation to which such shares were granted and until other restrictive conditions relating to the Restricted Stock Award are met. Any Common Stock, any other securities of the Company and any other property (except for cash dividends) distributed with respect to the shares subject to Restricted Stock Awards shall be subject to the same restrictions, terms and conditions as such restricted shares.

6) **Determination of Value.** For purposes of this Plan, the value of the Stock shall be the closing sales price on the New York Stock Exchange or the Nasdaq National Market System, as the case may be, on the date the value is to be determined as reported in The Wall Street Journal. If there are no trades on such date, the closing sale price on the last preceding business day upon which trades occurred shall be the fair market value. If the Stock is not listed on the New York Stock Exchange or quoted on the Nasdaq National Market System, the fair market value shall be determined based on the mean between the closing bid and asked prices, and if a public market does not exist for the Stock, then the value of the Stock shall be determined by the Administrator.

7) **Manner of Exercise.** An Optionee wishing to exercise an Option shall give written notice to the Company at its principal executive office, to the attention of the Chief Financial Officer of the Company, accompanied by an executed Subscription Agreement and by payment of the Option exercise price in accordance with Section 5(f). The date the Company receives written notice of an exercise hereunder accompanied by payment of the Option exercise price will be considered the date the Option is exercised. Promptly after receipt of such written notice and payment, the Company shall deliver to the Optionee or such other person permitted to exercise such option under Section 5(i), a certificate or certificates for the requisite number of shares of Stock.

8) **Rights.**

(a) Rights as Optionee - No Eligible Director shall acquire any rights as an Optionee unless and until an Option Agreement has been duly executed on behalf of the Company, delivered to the Optionee and executed by the Optionee.

(b) Rights as Stockholder - No person shall have any rights as a stockholder of the Company with respect to any Stock subject to an Option until the date that a stock certificate has been issued and delivered to the Optionee.

(c) No Right to Re-election - Nothing contained in this Plan or any Option Agreement shall be deemed to create any obligation on the part of the Board to nominate any Director for re-election by the Company's stockholders, or confer upon any Director the right to remain a member of the Board for any period of time, or at any particular rate of compensation.

9) **Registration and Resale.** The Board may, but shall not be required to, cause this Plan, the Options and the Stock subject to this Plan to be registered under the Securities Act and under the securities laws of any state. No Option may be exercised, and the Company shall not be obliged to grant any Stock upon exercise of an Option, unless, in the opinion of counsel for the Company, such exercise and grant is in compliance with all applicable federal and state securities laws and the rules and regulations promulgated thereunder. As a condition to the grant of an Option for the issuance of Stock upon the exercise of an Option, the Administrator may require that the Optionee agree to comply with such provisions and federal and state securities laws as may be applicable to such grant or the issuance of Stock, and that the Optionee delivers to the Company such documents as counsel for the Company may determine are necessary or advisable in order to substantiate compliance with applicable securities laws and the rules and regulations promulgated thereunder.

10) **Amendment, Suspension or Termination of the Plan.** The Board may at any time amend, alter, suspend or discontinue this Plan, except to the extent that stockholder approval is required for any amendment or alteration: (a) by Rule 16b-3 or applicable law in order to exempt from Section 16(b) of the Exchange Act any transaction contemplated by this Plan; (b) by the rules of the New York Stock Exchange, if the Company's securities are listed thereon; or (c) by the rules of Nasdaq pertaining to the National Market System, if the Company's securities are quoted thereon; provided, however, no amendment, alteration, suspension or discontinuation shall be made that would impair the rights of any Optionee under an Option without such Optionee's consent; and provided further, that any provision in this Plan relating to the eligibility of Directors to participate in this Plan, the timing of Option grants made under this Plan or the amount of Options granted to a Director under this Plan, shall not be amended more than once every six (6) months, other than to comport with the changes in the Code or the rules thereunder. Subject to the foregoing, the Administrator shall have the power to make such changes in the regulations and administrative provisions hereunder, or in any Option (with the Optionee's consent), as in the opinion of the Administrator may be appropriate from time to time.

11) **Indemnification of Administrator.** Members of the group constituting the Administrator shall be indemnified for actions with respect to this Plan to the fullest extent permitted by the Articles of Incorporation, as amended, and the Bylaws of the Company and by the terms of any indemnification agreement that has been or shall be entered into from time to time between the Company and any such person.

12) **Headings.** The headings used in this Plan are for convenience only, and shall not be used to construe the terms and conditions of this Plan.

Exhibit 10.5

SIXTH AMENDMENT TO CREDIT AGREEMENT

This Amendment, dated as of October 5, 2004, is made by and among ENTEGRIS, INC., a Minnesota corporation (the "Borrower"), each of the banks appearing on the signature pages hereof, together with such other banks as may from time to time become a party to the Credit Agreement (defined below) pursuant to the terms and conditions of Article VIII of the Credit Agreement (herein collectively called the "Banks" and individually each called a "Bank"), and WELLS FARGO BANK, NATIONAL ASSOCIATION, a national banking association, assignee of Wells Fargo Bank Minnesota, National Association, formerly known as Norwest Bank Minnesota, National Association in its separate capacity as administrative agent for itself and all other Banks (in such capacity, the "Agent").

Recitals

A. The Borrower, the Banks and the Agent have entered into a Credit Agreement dated as of November 30, 1999, as amended by a First Amendment to Credit Agreement dated as of October 17, 2000, a Second Amendment to Credit Agreement dated as of March 1, 2002, a Consent and Amendment Agreement dated as of February 7, 2003, a Fourth Amendment to Credit Agreement dated as of February 26, 2003 and a Fifth Amendment to Credit Agreement dated as of February 17, 2004 (as so amended, the "Credit Agreement").

B. The Borrower has requested that the Banks and the Agent amend the Credit Agreement to allow for certain additional indebtedness.

C. The Banks and the Agent are willing to grant the Borrower's request subject to the terms and conditions set forth below.

ACCORDINGLY, in consideration of the premises and for other good and valuable consideration, the Borrower, the Banks and the Agent agree as follows:

1. Defined Terms. All capitalized terms used in this Amendment and not otherwise specifically defined in this Amendment shall have the meanings given such terms in the Credit Agreement.

2. Indebtedness. Section 6.2(l) of the Credit Agreement is amended to read as follows:

"(l) Rate Hedging Obligations covering notional amounts not exceeding $20,000,000 in aggregate at any one time; and"

3. Notes. The Revolving Advances of the Bank shall continue to be evidenced by the Revolving Notes of the Borrower dated as of February 26, 2003. The definition of "Credit Agreement" in such Revolving Notes shall be deemed to include this Amendment.

4. Conditions Precedent. This Amendment shall become effective when the Agent shall have received the following, each in form and content acceptable to the Agent in its sole discretion:

(a) This Amendment duly executed on behalf of the Borrower, the Banks and the Agent;

(b) The Guarantor's Acknowledgments attached hereto, duly executed on behalf of each of the Guarantors;

5. Reference to and Effect on the Credit Agreement and the other Loan Documents. Except as otherwise amended by this Amendment, all of the terms and conditions of the Credit Agreement and the other Loan Documents prior to giving effect to this Amendment shall remain in full force and effect in accordance with their terms.

6. Counterparts. This Amendment may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which counterparts taken together shall constitute but one and the same instrument.

7. Borrower Release. The Borrower hereby absolutely and unconditionally releases and forever discharges the Agent and each of the Banks, and any and all participants, parent corporations, subsidiary corporations, affiliated corporations, insurers, indemnitors, successors and assigns thereof, together withal of the present and former directors, officers, agents and employees of any of the foregoing (the "Released Parties"), from any and all claims, demands or causes of action of any kind, nature or description, whether arising in law or equity or upon contract or tort or under any state or federal law or otherwise, which the Borrower has had, now has or has made claim to have against such Released Party for or by reason of any act, omission, matter, cause or thing whatsoever arising from the beginning of time to and including the date of this Amendment in connection with or related to the transactions evidenced by the Loan Documents, whether such claims, demands and causes of action are mature or unmatured or known or unknown.

8. No Waiver. The execution of this Amendment shall not be deemed to be a waiver of any Default or Event of Default under the Credit Agreement, whether or not known to the Agent and/or the Banks and whether or not existing on the date of this Amendment.

9. Representations and Warranties of the Borrower. The Borrower hereby represents and warrants to the Agent and the Banks as follows:

(a) The Borrower has all requisite power and authority to execute this Amendment and to perform all of its obligations under the Credit Agreement, as amended by this Amendment. This Amendment has been duly executed and delivered by the Borrower and constitutes the legal, valid and binding obligation of the Borrower, enforceable in accordance with its terms.

(b) The execution, delivery and performance by the Borrower of the Credit Agreement, this Amendment and the other Loan Documents have been duly authorized by all

necessary corporate action and do not (i) require any authorization, consent or approval by any governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, (ii) violate any provision of any law, rule or regulation or of any order, writ, injunction or decree presently in effect, having applicability to the Borrower, or the Articles of Incorporation or Bylaws of the Borrower, or (iii) result in a breach of or constitute a default under any indenture or loan or credit agreement or any other agreement, lease or instrument to which the Borrower is a party or by which it or its properties may be bound or affected.

(c) All of the representations and warranties contained in Article IV of the Credit Agreement are correct on and as of the date hereof as though made on and as of such date, except to the extent that such representations and warranties relate solely to an earlier date.

10. References. All references in the Credit Agreement to "this Agreement" shall be deemed to refer to the Credit Agreement as amended by this Amendment; and any and all references in any of the other Loan Documents to the "Credit Agreement" shall be deemed to refer to the Credit Agreement as amended by this Amendment. All references to schedules or exhibits in the Credit Agreement shall be deemed to include the amendments to such schedules and exhibits effected hereby.

11. Law. This Amendment shall be a contract made under the laws of the State of Minnesota, which laws shall govern all the rights and duties hereunder. Provisions of the Credit Agreement respecting consent to jurisdiction and waiver of jury trial shall apply, equally, to this Amendment.

(signature page follows)

IN WITNESS WHEREOF, the parties hereby have caused this Amendment to be executed by their respective officers thereunto duly authorized as of the date first above written.

ENTEGRIS, INC.

By: /s/ James E. Dauwalter

Title: Chief Executive Officer

and

By: /s/ John D. Villas

Title: Chief Financial Officer

WELLS FARGO BANK, NATIONAL ASSOCIATION, as a Bank and as Agent

By: /s/ Richard Trembley

Title: Vice President

HARRIS TRUST AND SAVINGS BANK, as a Bank

By: /s/ Michael Fordney

Title: Vice President

Exhibit 10.6

SEVENTH AMENDMENT TO CREDIT AGREEMENT

This Amendment, dated as of February 25, 2005, is made by and among ENTEGRIS, INC., a Minnesota corporation (the "Borrower"), each of the banks appearing on the signature pages hereof, together with such other banks as may from time to time become a party to the Credit Agreement (defined below) pursuant to the terms and conditions of Article VIII of the Credit Agreement (herein collectively called the "Banks" and individually each called a "Bank"), and WELLS FARGO BANK, NATIONAL ASSOCIATION, a national banking association, assignee of Wells Fargo Bank Minnesota, National Association, formerly known as Norwest Bank Minnesota, National Association in its separate capacity as administrative agent for itself and all other Banks (in such capacity, the "Agent").

Recitals

A. The Borrower, the Banks and the Agent have entered into a Credit Agreement dated as of November 30, 1999, as amended by a First Amendment to Credit Agreement dated as of October 17, 2000, a Second Amendment to Credit Agreement dated as of March 1, 2002, a Consent and Amendment Agreement dated as of February 7, 2003, a Fourth Amendment to Credit Agreement dated as of February 26, 2003 a Fifth Amendment to Credit Agreement dated as of February 17, 2004 and a Sixth Amendment to Credit Agreement dated as of October 5, 2004 (as so amended, the "Credit Agreement").

B. The Borrower has requested that the Banks and the Agent amend the Credit Agreement to extend the Maturity Date.

C. The Banks and the Agent are willing to grant the Borrower's request subject to the terms and conditions set forth below.

ACCORDINGLY, in consideration of the premises and for other good and valuable consideration, the Borrower, the Banks and the Agent agree as follows:

1. Defined Terms. All capitalized terms used in this Amendment and not otherwise specifically defined in this Amendment shall have the meanings given such terms in the Credit Agreement.

2. Maturity Date. The definition of "Maturity Date" in Section 1.1 of the Credit Agreement is amended by deleting "February 26, 2005" and inserting "May 26, 2005" in place thereof.

3. Notes. The Revolving Advances of the Bank shall continue to be evidenced by the Revolving Notes of the Borrower dated as of February 26, 2003. The definition of "Credit Agreement" in such Revolving Notes shall be deemed to include this Amendment.

4. Conditions Precedent. This Amendment shall become effective when the Agent shall have received the following, each in form and content acceptable to the Agent in its sole discretion:

(a) This Amendment duly executed on behalf of the Borrower, the Banks and the Agent;

(b) The Guarantor's Acknowledgments attached hereto, duly executed on behalf of each of the Guarantors;

5. Reference to and Effect on the Credit Agreement and the other Loan Documents. Except as otherwise amended by this Amendment, all of the terms and conditions of the Credit Agreement and the other Loan Documents prior to giving effect to this Amendment shall remain in full force and effect in accordance with their terms.

6. Counterparts. This Amendment may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which counterparts taken together shall constitute but one and the same instrument.

7. Borrower Release. The Borrower hereby absolutely and unconditionally releases and forever discharges the Agent and each of the Banks, and any and all participants, parent corporations, subsidiary corporations, affiliated corporations, insurers, indemnitors, successors and assigns thereof, together withal of the present and former directors, officers, agents and employees of any of the foregoing (the "Released Parties"), from any and all claims, demands or causes of action of any kind, nature or description, whether arising in law or equity or upon contract or tort or under any state or federal law or otherwise, which the Borrower has had, now has or has made claim to have against such Released Party for or by reason of any act, omission, matter, cause or thing whatsoever arising from the beginning of time to and including the date of this Amendment in connection with or related to the transactions evidenced by the Loan Documents, whether such claims, demands and causes of action are mature or unmatured or known or unknown.

8. No Waiver. The execution of this Amendment shall not be deemed to be a waiver of any Default or Event of Default under the Credit Agreement, whether or not known to the Agent and/or the Banks and whether or not existing on the date of this Amendment.

9. Representations and Warranties of the Borrower. The Borrower hereby represents and warrants to the Agent and the Banks as follows:

(a) The Borrower has all requisite power and authority to execute this Amendment and to perform all of its obligations under the Credit Agreement, as amended by this Amendment. This Amendment has been duly executed and delivered by the Borrower and constitutes the legal, valid and binding obligation of the Borrower, enforceable in accordance with its terms.

(b) The execution, delivery and performance by the Borrower of the Credit Agreement, this Amendment and the other Loan Documents have been duly authorized by all

necessary corporate action and do not (i) require any authorization, consent or approval by any governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, (ii) violate any provision of any law, rule or regulation or of any order, writ, injunction or decree presently in effect, having applicability to the Borrower, or the Articles of Incorporation or Bylaws of the Borrower, or (iii) result in a breach of or constitute a default under any indenture or loan or credit agreement or any other agreement, lease or instrument to which the Borrower is a party or by which it or its properties may be bound or affected.

(c) All of the representations and warranties contained in Article IV of the Credit Agreement are correct on and as of the date hereof as though made on and as of such date, except to the extent that such representations and warranties relate solely to an earlier date.

10. References. All references in the Credit Agreement to "this Agreement" shall be deemed to refer to the Credit Agreement as amended by this Amendment; and any and all references in any of the other Loan Documents to the "Credit Agreement" shall be deemed to refer to the Credit Agreement as amended by this Amendment. All references to schedules or exhibits in the Credit Agreement shall be deemed to include the amendments to such schedules and exhibits effected hereby.

11. Law. This Amendment shall be a contract made under the laws of the State of Minnesota, which laws shall govern all the rights and duties hereunder. Provisions of the Credit Agreement respecting consent to jurisdiction and waiver of jury trial shall apply, equally, to this Amendment.

(signature page follows)

IN WITNESS WHEREOF, the parties hereby have caused this Amendment to be executed by their respective officers thereunto duly authorized as of the date first above written.

ENTEGRIS, INC.

By: _____

Title: _____

and

By: /s/ John D. Villas

Title: CFO

WELLS FARGO BANK, NATIONAL ASSOCIATION, as a Bank and as Agent

By: /s/ Richard Trembley

Title: Vice President

HARRIS TRUST AND SAVINGS BANK, as a Bank

By: /s/ Michael Fordney

Title: Vice President

EXHIBIT 31.1

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, James E. Dauwalter, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Entegris, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects, the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and

c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's second fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 7, 2005

/s/ James E. Dauwalter

Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John D. Villas, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Entegris, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects, the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's second fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 7, 2005

/s/ John D. Villas

Chief Financial Officer
(Principal Financial and Accounting Officer)

EXHIBIT 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q (the "Report") of Entegris, Inc, a Minnesota corporation (the "Company"), for the quarter ended February 26, 2005 as filed with the Securities and Exchange Commission on the date hereof, I, James E. Dauwalter, President and Chief Executive Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 7, 2005

/s/ James E. Dauwalter
Chief Executive Officer

EXHIBIT 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q (the "Report") of Entegris, Inc, a Minnesota corporation (the "Company"), for the quarter ended February 26, 2005 as filed with the Securities and Exchange Commission on the date hereof, I, John D. Villas, Chief Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 7, 2005

/s/ John D. Villas
Chief Financial Officer