

Via EDGAR – CORRESP

Mr. John Cash
Branch Chief
Securities and Exchange Commission
Division of Corporation Finance
Washington, D.C. 20549-4631

RE: Entegris, Inc.

Form 10-K for the fiscal year ended December 31, 2008

Definitive Proxy Statement filed April 3, 2009

Form 10-Q, for the quarter ended March 28, 2009

File No. 001-32598

Dear Mr. Cash:

This letter responds to your letter of June 30, 2009 with comments upon the above disclosure documents filed by Entegris, Inc. (“Entegris” or the “Company”).

This letter will respond to your comments in the order and use the same numerical reference presented in your letter of June 30th. Our response to each comment follows the repetition of your comment. Unless otherwise specified, all numbers referenced herein for disclosure or supplemental information are in thousands.

S.E.C. Comment #1.

1. We note that Lynn Blake signed your Form 10-K for the fiscal year ended December 31, 2008, as your chief accounting officer. In future filings, please include biographical information on your chief accounting officer in your list of executive officers under Part III, Item 10 of Form 10-K.

Entegris Response to S.E.C. Comment # 1:

Ms. Blake’s biographical information was not included in the Executive Officer section of Item 1 of the Company’s Form 10-K because we do not believe that she is an executive officer within the meaning of Exchange Act Rule 3b-7. While as Vice President - Finance and the chief accounting officer she is responsible for the Company’s accounting operations with the corporate controller and divisional controllers reporting to her, she was appointed to her position by the Executive Vice President & Chief Financial Officer, to whom she reports. She is not elected by the Company’s Board of Directors and has not been designated as an executive officer by the Board of Directors. Ms. Blake does not serve on the senior most management policy-making body of the Company, the Core Leadership Team (“CLT”). It is our view that only members of the CLT, all of whom report directly to the President and Chief Executive Officer, are elected by the Board of Directors, are designated as executive officers by the Board of Directors and meet regularly to make Company wide policy decisions fit within the definition of executive officer in Rule 3b-7. In future filings we will re-evaluate this position in light of the Rule 3b-7 definition and the current roles of management below the CLT.

S.E.C. Comment #2.

2. For all proceedings disclosed in this section, please include a brief description of the relief sought. See Item 103 of Regulation S-K.

Entegris Response to S.E.C. Comment # 2:

Please see the proposed revised disclosure with revisions from the Form 10-K Item 3 disclosure in italics:

“As previously disclosed, on March 3, 2003 the Company’s predecessor, Mykrolis Corporation, filed a lawsuit against Pall Corporation in the United States District Court for the District of Massachusetts alleging infringement of two of the Company’s U.S. patents by certain fluid separation systems and related assemblies used in photolithography applications manufactured and sold by the defendant. The Company’s lawsuit sought a preliminary injunction preventing the defendant from the manufacture, use, sale, offer for sale or importation into the U.S. of any infringing product *as well as damages*. On April 30, 2004, the Court issued a preliminary injunction against Pall Corporation and ordered Pall to immediately stop making, using, selling, or offering to sell within the U.S., or importing into the U.S., its PhotoKleen EZD-2 Filter Assembly products or “any colorable imitation” of those products. On January 18, 2005, the Court issued an order holding Pall Corporation in contempt of court for the violation of the preliminary injunction and ordering Pall to disgorge all profits earned from the sale of its PhotoKleen EZD-2 Filter Assembly products and colorable imitations thereof from the date the preliminary injunction was issued through January 12, 2005. In addition, Pall was also ordered to reimburse Mykrolis for certain of its attorney’s fees associated with the contempt and related proceedings. The Court’s order also dissolved the preliminary injunction, effective January 12, 2005, based on certain prior art cited by Pall which it alleged raised questions as to the validity of the patents in suit. On February 17, 2005, the Company filed notice of appeal to the U.S. Circuit Court of Appeals for the Federal Circuit appealing the portion of the Court’s order that dissolved the preliminary injunction and Pall filed a notice of appeal to that court with respect to the finding of contempt and the award of attorneys’ fees. On June 13, 2007 the Court of Appeals issued an opinion dismissing Pall’s appeal for lack of jurisdiction and affirming the District Court’s order dissolving the preliminary injunction.

On April 6, 2006 the Company filed a lawsuit against Pall Corporation in the United States District Court for the District of Massachusetts alleging infringement of the Company’s newly issued U.S. patent No. 7,021,667 by certain filter assembly products used in photolithography applications that are manufactured and sold by the defendant. The Company’s lawsuit seeks a preliminary injunction preventing the defendant from the manufacture, use, sale, offer for sale or importation into the U.S. of the infringing products *as well as damages*. On October 23, 2006 the Company’s motion for preliminary injunction was argued before the court. On March 31, 2008 the court issued an order denying the Company’s motion for a preliminary injunction.

On August 23, 2006 the Company filed a lawsuit against Pall Corporation in the United States District Court for the District of Massachusetts alleging infringement of the Company’s newly issued U.S. patent No. 7,037,424 by certain fluid separation modules and related separation apparatus, including the product known as the EZD-3 Filter Assembly, used in photolithography applications that are manufactured and sold by the defendant. *The Company’s lawsuit seeks a preliminary injunction preventing the defendant from the manufacture, use, sale, offer for sale or importation into the U.S. of the infringing products as well as damages.* It is believed that the EZD-3 Filter Assembly was introduced into the market by the defendant in response to the action brought by the Company in March of 2003 as described above. On May 5, 2008, the court issued an order consolidating this case with the two cases described in the preceding paragraphs for purposes of discovery; these cases are currently in the discovery stage.

As previously disclosed, on December 16, 2005 Pall Corporation filed suit against the Company in U.S. District Court for the Eastern District of New York alleging patent infringement. Specifically, the suit alleges infringement of two of plaintiff’s patents by one of the Company’s gas filtration products and by the packaging for certain of the Company’s liquid filtration products. *This lawsuit seeks damages for the alleged infringements.* Both products and their predecessor products have been on the market for a number of years.

The Company intends to vigorously defend this suit and believes that it will ultimately prevail. This case is currently awaiting a hearing before the court for claim construction of the patents in suit.

On May, 4, 2007 Pall Corporation filed a lawsuit against the Company in the U.S. District Court for the Eastern District of New York alleging patent infringement. Specifically, the suit alleges that certain of the Company's point-of-use filtration products infringe a newly issued Pall patent, as well as three older Pall patents. Pall's action, which relates only to the U.S., asserts that "on information and belief" the Company's Impact 2 and Impact Plus point-of-use photoresist filters infringe a patent issued to Pall on March 27, 2007, as well as three older patents. *This lawsuit seeks damages for the alleged infringements.* The Company intends to vigorously defend this suit and believes that it will ultimately prevail. This case is currently in the discovery stage."

The foregoing revised disclosure will be used in future filings with appropriate further revision to reflect material developments in the described litigation.

S.E.C. Comment #3.

3. We note that the evaluation of the recoverability of long-lived assets required you to make significant estimates and assumptions. Please provide us and revise future filings to comprehensively address how you evaluated your property, plant and equipment and your intangible assets (e.g. developed technology, trade names and customer relationships for impairment. Specifically address the following:
- Identify the nature of your asset groups and provide a more comprehensive discussion of how you estimate the future cash flows of your asset groups to test them for recoverability. Refer to paragraphs 16-21 of SFAS 144;
 - Identify those asset groups for which their undiscounted cash flows are not materially different from their carrying amount and quantify the carrying amount of those assets groups. In this regard, your disclosures should clearly communicate to investors the amount of your property, plant and equipment that is at-risk for impairment, as this is your largest asset;
 - Quantify the material assumptions (ranges and/or weighted averages) underlying your undiscounted cash flow analyses and quantify the potential impact of changes in each material assumption by providing sensitivity analyses.

Entegris Response to S.E.C. Comment # 3:

Please see the proposed revised future disclosure with revisions from the Form 10-K Item 7 – Critical Accounting Policies – Impairment of Goodwill and Long-lived Assets disclosure highlighted by italics:

Impairment of Goodwill and Long-Lived Assets The Company assesses the impairment of goodwill at least annually *as of August 31*. *In addition*, whenever events or changes in circumstances indicate that the carrying value may not be recoverable, *the Company undertakes an additional impairment assessment*. 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, resulting in the Company's market capitalization being below its net book value.

In accordance with Statement of Financial Accounting Standards ("SFAS") No. 142, *Goodwill and Other Intangible Assets*, the Company tested for impairment of its goodwill in connection with its annual impairment test of goodwill as of August 31, 2008, and due to events and changes in circumstances through the end of 2008, the Company had an additional triggering event that indicated impairments had occurred.

Based on the results of the Company's assessment of goodwill for impairment, it was determined that the carrying value of the Company's net assets exceeded its estimated fair value. Therefore, the Company performed a second step of the impairment test to determine the implied fair value of its goodwill. The Company performed the assessment of impairment of its goodwill *as of August 31, 2008 (its annual impairment test date) and, due to events and circumstances, through the end of the third and fourth quarters of the year ended December 31, 2008. During the third quarter the Company wrote off \$379.8 million of goodwill and at the end of the year the Company wrote off the remaining goodwill of \$94.0 million.* (See Note 2 to the consolidated financial statements.)

The Company routinely considers whether indicators of impairment *of the value* of its property and equipment assets, particularly its molding equipment, and its intangible assets, are present. If such indicators are present, it is determined whether the sum of the estimated undiscounted cash flows attributable to the asset group 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 asset group over its respective fair value. Fair value is determined by discounting estimated future cash flows, appraisals or other methods deemed appropriate. If the asset groups determined to be impaired are to be held and used, the Company recognizes an impairment charge to the extent the *fair value* attributable to the asset group is less than the assets' carrying value. The fair value of the assets then becomes the assets' new carrying value, which is depreciated over the remaining estimated useful life of the assets.

As of December 31, 2008, the Company had \$159.7 million of *net* property, plant and equipment and \$93.1 million of *net* intangible assets. In connection with the triggering events discussed above, during the third and fourth quarters of fiscal year 2008 the Company reviewed its long-lived assets in accordance with SFAS No. 144 and determined that none of its long-lived assets were impaired. The determination was based on reviewing estimated undiscounted cash flows for the Company's asset groups, *all of which* were greater than their carrying values. As required under U.S. generally accepted accounting principles, the SFAS No. 144 impairment *analyses* occurred before the SFAS No. 142 goodwill impairment assessments.

Long-lived assets are grouped with other assets and liabilities at the lowest level (asset groups) for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. The Company has four asset groups, identified by assessing the Company's identifiable cash flows and the interdependence of such cash flows: Contamination Control Solutions (CCS), Microenvironments (ME), Poco Graphite (POCO) and Entegris Specialty Coatings (ESC).

The Company's estimate of undiscounted cash flows attributable to the asset groups included only future cash flows (cash inflows less associated cash outflows) that are directly associated with and that are expected to arise as a direct result of the use and eventual disposition of the asset group. Estimates of future cash flows used to test the recoverability of a long-lived asset (asset group) incorporated the Company's assumptions about its use of the asset group and were determined for the remaining useful life of the primary asset (the principal long-lived tangible asset being depreciated or intangible asset being amortized that is the most significant component asset from which the asset group derives its cash-flow-generating capacity) of each asset group. The key assumptions were projected revenues, gross margin expectations and operating cost estimates. Future cash flows used to test the recoverability of each asset group were made for the remaining useful life of the asset group, which itself is based on the remaining useful life of the primary asset of each group as described below. Where the primary asset is not the asset of the asset group with the longest remaining useful life, estimates of future cash flows for the group assume the sale of the group at the end of the remaining useful life of the primary asset.

The recoverability test included all cash outflows that the asset group is estimated to incur to obtain the estimated future cash inflows. Accordingly, where required, the Company reflected within the cash flows of its asset groups an allocation of corporate expenses to its asset groups, because those assets require the services provided by the Company's shared services infrastructure (among others, finance, human resources, information technology, sales and marketing, legal) if the asset group were operated on a stand-alone basis. All asset groups had future undiscounted cash flows in excess of their carrying values by at least 40%.

If either revenues for the Company's asset groups decreased from the current forecast without offsetting decreases in costs, or if the asset group's operating costs increased from the current forecast without offsetting increases in revenues, the estimated undiscounted cash flows of the asset groups could be less than their carrying values. This would require an impairment loss to be recognized based on the excess of the carrying amount of the respective asset group over its fair value. As noted, fair value would be determined by discounting estimated future cash flows, appraisals or other methods deemed appropriate.

As described above, the evaluation of the recoverability of long-lived assets requires the Company to make significant estimates and assumptions. These estimates and assumptions primarily include, but are not limited to, the identification of the asset group at the lowest level of independent cash flows and the primary asset of the group; and long-range forecasts of revenue and costs, reflecting management's assessment of general economic and industry conditions, operating income, depreciation and amortization and working capital requirements.

Due to the inherent uncertainty involved in making these estimates, particularly in the current economic environment and plan for a recovery, actual results could differ from those estimates. In addition, changes in the underlying assumptions would have a significant impact on the conclusion that an asset group's carrying value is recoverable, or the determination of any impairment charge if it was determined that the asset values were indeed impaired.

Due to the decline in the Company's market capitalization and the uncertain economic environment within the semiconductor industry, the Company will continue to monitor circumstances and events in future periods to determine whether additional asset impairment testing is warranted. It is not unlikely that in the future the Company may no longer be able to conclude that there is no impairment of its long-lived assets, nor can the Company provide assurance that material impairment charges of long-lived assets will not occur in future periods.

Subject to any further comments that the Staff may have, we will include the foregoing disclosure (revised to reflect future developments, as appropriate) in future filings on Form 10-K or Form 10-Q.

S.E.C. Comment #4.

4. Given the significant changes in your deferred tax asset valuation allowance, please enhance your future disclosures to identify the positive and negative evidence you consider in determining if a valuation allowance was necessary. Refer to paragraphs 23 and 24 of SFAS 109.

Entegris Response to S.E.C. Comment # 4:

The Company will expand its future disclosure concerning its deferred tax valuation allowance to include a description of positive and negative evidence considered by management in determining whether a valuation allowance was necessary.

S.E.C. Comment #5.

5. In future filings, revise the table of contractual obligations to include estimated interest payments related to outstanding debt. Refer to Item 303(a)(5) of Regulation S-K.

Entegris Response to S.E.C. Comment # 5:

In future filings the Company will include estimated interest payment obligations related to outstanding debt in the table of contractual obligations included in Management's Discussion and Analysis in accordance with Regulation S-K Item 303(a).

S.E.C. Comment #6.

6. We note your reference to independent valuation specialists. Please tell us the nature and extent of the third parties' involvement and tell us whether you believe they are acting as experts as defined in the Securities Act of 1933.

Entegris Response to S.E.C. Comment # 6:

The Company retained an independent valuation specialist to assist management in performing certain procedures in arriving at the fair value of the property, plant and equipment and of the intangible assets of Poco Graphite, Inc. listed in footnote (3) to the Company's Consolidated Financial Statements for the year ended December 31, 2008. The valuation specialist reviewed the documentation we acquired with respect to the indicated property, plant and equipment and intangible assets and, based on their experience in valuing such assets, assisted us in analyzing the data and determining a valuation for these assets. The Company believes that in this valuation process the independent valuation specialist was acting as a consultant and not as an expert as that term is used in Section 11 of the Securities Act of 1933. The valuations set forth in footnote 3 are the Company's valuations; the reference to the independent valuation specialist was not intended to shift responsibility for that valuation from the Company but merely to indicate that the Company had sought the assistance of an independent third party in determining the valuations reported. In future filings the Company will omit all reference to this independent valuation specialist.

S.E.C. Comment #7.

7. Please file the certifications exactly as set forth in Item 601 (b)(31) of Regulation S-K. We note that a definition of internal control over financial reporting was added to section 4(d) and the following language was missing in the same paragraph: "(the registrant's fourth fiscal quarter in the case of an annual report)."

Entegris Response to S.E.C. Comment # 7:

Attached as Annex 1 to this Response are the forms of Exhibits 31.1 and 31.2 that will be included with all future Reports filed by the Company on Form 10-K or Form 10-Q with the appropriate form identified in paragraph 1 thereof.

S.E.C. Comment #8.

8. We note that it appears you have not filed on EDGAR certain exhibits and schedules to the document you have filed as an Exhibit to the Form 8-K pursuant to item 601(b)(10) of Regulation S-K. For example, certain schedules and exhibits to the credit agreement filed as Exhibit 99.1 to the Entegris, Inc. Form 8-K filed March 4, 2009, have not been filed on EDGAR. Please advise. Refer to Item 601 (b)(10) of Regulation S-K.

Entegris Response to S.E.C. Comment # 8:

We acknowledge that certain exhibits and schedules to the Amended and Restated Credit Agreement with Wells Fargo Bank, National Association, dated March 2, 2009 (the "Credit Agreement") filed as Exhibit 99.1 to the Form 8-K filed on March 4, 2009 were not included in Exhibit 99.1. We believe that the schedules and exhibits would add substantial volume to the filing (approximately 185 additional pages) and that the highly technical language of these schedules and exhibits provide little disclosure value to the investor and do not contain information which is material to an investment decision which is not otherwise disclosed in the Credit Agreement. In reaching this determination we drew guidance from the second sentence of Item 601(b)(2) of Regulation S-K. We are prepared to file a Form 8-K/A with the Credit Agreement together with all exhibits and schedules attached (subject to a confidentiality request with respect to certain schedules that contain sensitive financial information with respect to the Company's bank accounts) if the staff so requests.

S.E.C. Comment #9.

9. In future filings, please describe your policies and procedures for the review, approval, or ratification of any transaction required to be reported under Item 404(a) of Regulation S- K. Please refer to Item 404(b) of Regulation S-K.

Entegris Response to S.E.C. Comment # 9:

In future filings the Company will include a description of our policies and procedures for the review, approval or ratification of any transaction required to be disclosed under Item 404(a) of Regulation S-K.

S.E.C. Comment #10.

10. We note that you disclose that you target base salary at the median level against peer companies for your named executive officers. Please disclose whether you target the other elements of compensation for your named executive officers against peer companies. Also, please disclose where actual payments of each element of compensation fell for each named executive officer within targeted parameters. To the extent actual compensation was outside a targeted percentile range, please explain why.

Entegris Response to S.E.C. Comment # 10:

As noted on page 9 of our Proxy Statement filed April 3, 2009 ("our 2009 Proxy Statement") under the heading "Evaluation of Compensation against External Data", all elements of compensation are evaluated against corresponding compensation data from comparable companies collected by Frederic W. Cook & Co., the compensation consultant to the Management Development & Compensation Committee ("F.W. Cook"), to assure that they are competitive with the companies in the peer group described on page 9. However, short-term

and long-term incentive compensation is not specifically targeted at the median level because it is performance based so that if the Company's performance with respect to the metrics governing those compensation elements would cause incentive compensation to be above the median, the Committee believes that the stockholders will benefit from the superior performance. The upward limits on incentive compensation were established at 200% of target to prevent unreasonable levels of compensation even in the face of extraordinary Company performance; not to limit incentive compensation to the median level. The Committee concluded that limiting incentive compensation to the median level would effectively neutralize the performance based incentive.

As described in the response to Comment 13 below, target compensation for 2008 was established by the Committee primarily in reliance on peer company comparative compensation data from 2007, subject to the other considerations described in that response. With respect to actual compensation in 2008, base compensation was at the median level and, as disclosed on pages 13 and 14 of our 2009 Proxy Statement, the Company's performance in 2008 did not qualify for any short-term incentive compensation or long-term performance based compensation payable with respect to 2008 performance, for the named executive officers. For 2009 the named executive officers will receive no short-term incentive compensation and, in addition, had their base salary reduced by 23.85% (of which 10% of base salary was replaced by a restricted stock award of equal value on the date of award) in order to respond to the severe economic conditions confronting the Company.

S.E.C. Comment #11.

11. We note your disclosure that "comparative compensation information is just one of the several analytical tools that are used in setting executive compensation." Please provide a materially complete description of the other "analytical tools" you use to determine compensation and describe in materially complete detail how you used each of these tools to derive the compensation amounts you paid in 2008.

Entegris Response to S.E.C. Comment # 11:

The other analytical tools referred to on page 11 of the Company's 2009 Proxy Statement are referred to in the paragraph preceding the disclosure referred to in Comment 11: internal pay equity, wealth accumulation, and individual performance. In addition, that language is intended to refer to compensation adjustments due to increased responsibility and the performance determinants provided by both the short-term and long-term incentive compensation programs, which, while evaluated against comparative compensation information, is determined by the Company's performance. Further, we do not read the language you have referred to as mandating the use of these and other analytical tools but as disclosing merely that the Management Development & Compensation Committee may use them under circumstances where they deem it appropriate. Such circumstances include the short-term and long-term performance compensation and might also include responding to a competitive offer of employment to one of the Company's named executive officers or other key employee in order to retain them in the employ of the Company. As noted above and on pages 13 and 14 of our 2009 Proxy Statement, for 2008 the Company's performance did not qualify for payment under the short-term incentive plan or for performance payment under the long-term incentive plan. The 2008 base salary for the named executive officers was established as follows: Chief Executive Officer — by the terms of the Amended and Restated Employment Agreement, dated as of May 4, 2005, between the Company and Mr. Argov (see Exhibit 10.13 to Quarterly Report on Form 10-Q for the period ended April 2, 2005 of Mykrolis Corporation) which has been annually evaluated against comparative compensation data by the Committee and has been unchanged since 2006 together with the qualitative factor referred to in our response to Comment 15 below; the Chief Operating Officer — comparative data as adjusted to

reflect his promotion to that role as well as the increased responsibilities assigned to the position; Chief Financial Officer – comparative data as adjusted to reflect his promotion to that position; Senior Vice President & General Counsel and Senior Vice President Human Resources – comparative data.

S.E.C. Comment #12.

12. We note disclosure that “the Committee may elect to not use the comparative compensation information at all in the course of making compensation decisions.” Please disclose whether or not the Management Development & Compensation Committee elected to use the comparative compensation information in the course of making compensation decisions in 2008 and if the comparative data was not utilized, explain why.

Entegris Response to S.E.C. Comment # 12:

In the course of making compensation decisions for 2008 the Management Development & Compensation Committee elected to use comparative compensation information subject to the adjustments described in our answer to Comment 11 above. Please be advised that the reserved right not to use comparative compensation information is intended to be used in the context of a competitive situation in order to either attract or retain an employee deemed to be critical to the success of the Company or to recognize extraordinary individual accomplishment or increase in responsibilities.

S.E.C. Comment #13.

13. For each named executive officer state the material factors that were considered in deriving the size of the restricted stock and stock option awards and provide substantive analysis and insight into why the Management Development & Compensation Committee determined that the levels of compensation were appropriate in light of the factors considered.

Entegris Response to S.E.C. Comment # 13:

As disclosed in our 2009 Proxy Statement, for 2008 the long-term incentive plan equity awards consisted of: 50% in value of stock options vesting over 3 years with a seven year life and 50% performance shares based on the Company’s performance with respect to revenue growth and ROIC over a three year period. The performance shares earned will vary with the strength of the Company’s performance with respect to these metrics from 0 to 200% of the nominal award. In determining the size of the equity award pool the Committee evaluated data developed by F.W. Cook with respect to share usage and dilution analysis and fair value transfer. In determining the specific size of the awards for the named executive officers the Committee evaluated comparative prior year data compiled by F.W. Cook from the “peer” companies listed on page 9 of our 2009 Proxy Statement and considered base salary, short term incentive compensation, long term compensation and total direct compensation. A summary of the data evaluated is as follows:

| Name | 2007 Base Comp. | 2007 Peer Median Base Comp. | 2007 Target Short Term Incentive Comp. | 2007 Peer Median Short Term Incentive Comp. | 2007 Long Term Incentive Comp. | 2007 Peer Median Long Term Incentive Comp. | 2007 Target Total Direct Comp. | 2007 Peer Median Target Total Direct Comp. |
|-------------------------------------|-----------------------|---|---|---|--|--|--|--|
| Gideon Argov (CEO) | \$600K | \$676K | \$ 450K | \$ 693K | \$2,514K | \$2,250K | \$3,564K | \$3,505K |
| Bertrand Loy (COO) | \$307K | \$363K | \$ 230K | \$ 263K | \$ 538K | \$ 869K | \$1,075K | \$1,404K |
| Gregory Graves (CFO) | \$275K | \$343K | \$ 206K | \$ 239K | \$ 430K | \$ 693K | \$ 911 K | \$1,324K |
| Peter Walcott (SVP & GC) | \$259K | \$299K | \$ 194K | \$ 175K | \$ 323K | \$ 279K | \$ 775K | \$ 762K |
| John J. Murphy (SVP HR) | \$240K | \$241K | \$ 180K | \$ 104K | \$ 143K | \$ 150K | \$ 563K | \$ 495K |

The Committee evaluated the data summarized above and concluded that the 2007 compensation generally approximated the median level of the “peer” companies with respect to total direct compensation, with base compensation generally lagging the median and incentive compensation above the median. The Committee concluded that this allocation was consistent with the performance based compensation environment that it wished to promote. Based on this data for 2007 the Committee made 2008 equity awards at the same level as the 2007 equity awards.

S.E.C. Comment #14.

14. In future filings, please disclose whether the named executive officers are in compliance with your stock ownership guidelines.

Entegris Response to S.E.C. Comment # 14:

In future filings the Company will disclose whether the named executive officers are in compliance with the Company’s stock ownership guidelines. Please be advised that all named executive officers were in compliance with these guidelines as of December 31, 2008.

S.E.C. Comment #15.

15. Please disclose the individual and company performance that the Management Development & Compensation Committee evaluated in determining the compensation of the chief executive officer.

Entegris Response to S.E.C. Comment # 15:

The Management Development & Compensation Committee evaluated the same performance criteria to evaluate the CEO's compensation as described in response to Comments 11, 12 and 13 above for the other named executive officers. In addition the Committee evaluated the CEO's compensation against the requirements of the Amended and Restated Employment Agreement, dated as of May 4, 2005, between the Company and Mr. Argov (see Exhibit 10.13 to Quarterly Report on Form 10-Q for the period ended April 2, 2005 of Mykrolis Corporation) as well as the qualitative factor of the Committee's perception of the CEO's leadership performance.

S.E.C. Comment #16.

16. In future filings, please consider reformatting the disclosure to provide information about the potential payouts in tabular format that shows the maximum payouts in the applicable circumstances. Columns of the table could be presented for payments owed for employee termination for good reason, employer termination for cause, payments upon termination 'for change in control, and other events you describe. Such a presentation might make the disclosure concise and more accessible, and would allow you to consolidate and simplify associated text. See Section VT of Release No. 33-8732A, which refers to the use of tabular presentations or bullet lists for complex material, wherever possible.

Entegris Response to S.E.C. Comment # 16:

In future filings the Company will consider reformatting the disclosure concerning potential change in control payments to the named executive officers in a tabular format as you describe. As a general matter, however, under the agreements in question (see Exhibit 10.31 to Form 10-K Annual Report for the period ended August 27, 2005) the same level of payout is provided after a change in control whether the termination event is voluntary for good reason or involuntary without cause. If termination is voluntary without good reason or is involuntary for cause, there is no payout. Hence the more textual approach to the current disclosure.

S.E.C. Comment #17.

17. We note that under your amended credit facility you are required to maintain at least \$25 million in your U.S. bank accounts. Please tell us what consideration you have given to whether the \$25 million is considered legally restricted for purposes of inclusion in cash and cash equivalents for your balance sheet and cash flow presentations. Please refer to Rule 5-02 of Regulation S-X and SFAS 95.

Entegris Response to S.E.C. Comment # 17:

The Company has considered whether or not the requirement to maintain \$25 million in the Company's U.S. bank accounts constitutes a legal restriction for purposes of determining the appropriate inclusion in cash and cash equivalents in the Company's balance sheet and cash flow presentations. Under the amended credit facility, the Company is not required to segregate funds and no legal restrictions are imposed on the Company as to withdrawal or usage of its U.S. bank accounts. Therefore, the Company has determined that no legal restriction exists. Accordingly, the Company has included this \$25 million in U.S. bank accounts as cash and cash equivalents on its balance sheet and cash flows presentations.

S.E.C. Comment #18.

18. In future filings please clearly state whether you were in compliance with your debt covenants in all periods presented.

Entegris Response to S.E.C. Comment # 18:

In future filings the Company will clearly state whether it was in compliance with the debt covenants of the credit agreement in all periods presented. Please note that for all periods presented in the 2008 Form 10-K, the Company was in compliance with all applicable debt covenants.

S.E.C. Comment #19.

19. We note that EBITDA defined by your credit agreement is net income plus certain items including, but not limited to, depreciation, amortization, share based compensation expense, interest and income taxes. In future filings please clearly indicate what other amounts impacted this EBITDA calculation for the periods presented.

Entegris Response to S.E.C. Comment # 19:

In future filings the Company will clearly indicate what other amounts impacted the EBITDA calculation for the periods presented. The EBITDA calculation as defined by our credit agreement is net income plus depreciation, amortization, share based compensation expense, interest, income tax, non-cash gains and losses, extraordinary gains and losses, and foreign exchange expense. Non-cash gains and losses include, but are not limited to, adjustments to the Company's excess and obsolete inventory reserves and allowances for doubtful accounts and impairment charges of long-lived assets and investments. In addition, the credit agreement allows the add-back of up to \$1.0 million in restructuring charges.

S.E.C. Comment #20.

20. As highlighted in your Overall Summary of Financial Results for the Three Months Ended March 28, 2009 on page 17, we note a significant deterioration in net sales, gross profit, and net income during your fourth quarter. While we note instances where you have highlighted this deterioration in the discussion of your results of operations, it appears that a more robust discussion of the downturn in the overall economy is necessary in order to provide readers with a full understanding of management's views regarding the downturn in the overall economy, its impact on the company and management's plans to address this impact. This discussion should provide detailed information regarding your customers, recent order activity, expected trends, management's response for managing these events, potential future actions by management and any other detailed information that would help investors better understand how your operations, financial position and liquidity are being impacted by the current economic environment. Expand your liquidity discussion to address the expected impact to current and future cash flows and how you expect recent economic events, including the credit shortage, may affect other sources of liquidity.

Entegris Response to S.E.C. Comment # 20:

In future filings, the Company will include more expansive disclosure regarding the anticipated impacts of the global economic downturn on the Company's results of operations and liquidity.

As an example of our proposed future approach to this type of disclosure, using data for the Three Months Ended March 28, 2009, we would propose to include in future filings the additional explanatory discussion of the type inserted below in italics:

Overall Summary of Financial Results for the Three Months Ended March 28, 2009

For the three months ended March 28, 2009 (2009), net sales decreased by \$89.2 million, or 60%, to \$59.0 million compared to the three months ended March 29, 2008 (2008), primarily reflecting the severe downturn in both the capital and unit-driven segments of the semiconductor industry that began during the second half of 2008. The sales decline included an unfavorable foreign currency translation effect of \$2.3 million related to the year-over-year weakening of most international currencies versus the U.S. dollar. The first quarter sales decline was mitigated by the inclusion of sales of \$9.2 million from POCO, which was acquired in August 2008.

Excluding those factors, sales fell 65% in 2009 when compared to 2008. Sales were down 48% on a sequential basis over the fourth quarter of calendar 2008.

In management's view, the business downturn reached a trough during the three months ended March 28, 2009, and as of the date of this filing, the Company is beginning to experience a modest upturn in bookings and sales of certain of its unit-driven, consumable products. This upturn is predominantly driven by Asian foundry customers, particularly in Taiwan. To date, no indications of economic recovery in the Company's capital-driven product lines have been discernible. Management expects the upturn in the consumable side of the business to continue through the remainder of fiscal year 2009. However, the Company's current forecast for the remainder of the fiscal year does not assume increased volume in the capital side of the business. To date, management believes the revenue downturn is exclusively volume driven. The Company does not perceive any significant market share loss nor material sales price erosion. Additionally, given that no single customer accounts for more than 6% of the Company's annual revenue, an overall business recovery is not predicated on any one particular customer or group of customers but rather on the overall semiconductor sector returning to pre-recessionary levels.

The Company's gross margin in the first quarter of 2009 was 8.5% versus 43.2% in the year-ago period. The lower factory utilization associated with the significant year-over-year sales decrease resulted in manufacturing production falling significantly below normal capacity. Accordingly, the Company had period expense of \$8.1 million in the first quarter of 2009 included in cost of goods sold. The Company also recorded a \$4.1 million incremental charge associated with the fair market value write-up of inventory acquired in the acquisition of POCO.

The Company had lower year-over-year selling, general and administrative (SG&A) and engineering, research and development (ER&D) costs for the first quarter when compared to the year ago period, mainly reflecting lower employee costs. The Company incurred restructuring charges of \$4.6 million in the three months ended March 28, 2009.

The Company reported a net loss from continuing operations of \$37.7 million for the three-month period ended March 28, 2009 compared to income from continuing operations of \$3.2 million in the year ago three-month period.

During the three months ended March 28, 2009, the Company's operation activities used cash flow of \$9.5 million. Cash and cash equivalents were approximately \$95.5 million at March 28, 2009 compared with \$115.0 million at December 31, 2008. On March 2, 2009, the Company amended and restated its credit facility, replacing the Company's previous \$230 million revolving credit facility with a new \$150 million revolving credit facility maturing November 1, 2011.

The amended revolving credit facility requires the Company to maintain compliance with new debt covenants and to pay higher rates of interest. The Company's amended credit agreement contains various financial covenants that limit its ability to purchase no more than \$16 million in capital equipment in 2009 and no more than \$20 million in 2010; requires that the Company maintain a minimum level of cash in the United States; and achieve certain levels of EBITDA performance during 2009 and the first quarter of 2010. (Also see Note 7 to the Company's condensed consolidated financial statements).

Given the significantly reduced revenue level resulting from the dramatic economic downturn and the resulting negative cash flows for the Company, management has taken significant actions to date to enable it to maintain compliance with the amended debt covenants. However, further actions may be necessary if revenue levels do not improve from first quarter levels in the very near term. At current 2009 revenue levels, the Company's management would need to act upon additional identified contingency plan actions in order to avoid violating those covenants. These reductions, if necessary, would include such items as additional furloughs, permanent headcount reductions, office closures, further operating cost reductions, elimination of certain new product development initiatives and other cost reduction measures. Certain of the contingency plan actions may need to be implemented in the second quarter to realize the aggregate financial benefits necessary to maintain compliance with the Company's debt covenants. While there can be no assurances that these actions will be sufficient, such contingency plans are within the Company's control. Further, the Company has the intent and ability to execute as necessary and believes such benefits are achievable. However, there can be no assurance that these additional operating expense reductions will not have a lasting negative impact on the Company's long-term business prospects.

The Company believes that its cash and cash equivalents and funds available under its amended domestic and international credit facilities will be sufficient to meet its working capital and investment requirements for the next twelve months. If available liquidity is not sufficient to meet the Company's operating and debt service obligations as they come due, management's plans include further reducing expenditures as necessary, or pursuing alternative arrangements through additional equity or debt financing in order to meet the Company's cash requirements for the next twelve months. However, given recent economic events and the resulting credit shortage, there can be no assurance that any such financing would be available on commercially acceptable terms.

S.E.C. Comment #21.

21. In future filing, to the extent material, please enhance your discussion of foreign currency gains

Entegris Response to S.E.C. Comment # 21:

In future filings the Company will, to the extent material, enhance the disclosure concerning any foreign currency gains.

S.E.C. Comment #22.

22. We note that your days sales outstanding has increased from 57 days at the beginning of the period to 80 days due to the "lengthening of customer's paying patterns". We assume that this lengthening of paying patterns is as a result of current economic conditions. Please clarify and address what actions management is taking to address this negative trend, the potential impact on your liquidity and how you have determined the collectability of these accounts receivable in light of the increase in their days outstanding.

Entegris Response to S.E.C. Comment # 22:

The increase in Entegris' days sales outstanding is due to several factors, which include the significant decrease in revenue during the first quarter of 2009 and the lengthening of customer payment patterns as a result of current economic conditions. The Company's days

sales outstanding metric is determined by dividing the most recent quarter-ending accounts receivable balance by the average daily sales revenue for the most recent ending quarter. For the quarter-end March 28, 2009, the calculated value was negatively impacted by the significant decrease in revenue in relationship to the rate of collections for accounts receivable (which tends to lag significant changes to revenue trends). In addition, the duration of the lag or delay in collections was negatively affected by the lengthening of customer payment patterns – especially in Asia. Management is addressing the higher days sales trend by enhancing our credit review process and leveraging the existing relationship between our sales organization and the customer to improve on-time payment performance. If we are unable to effectively collect our accounts receivable assets, our liquidity may be negatively affected and limit our ability to fund operations. The Company believes it has adequately provided reserves for accounts deemed unlikely to be collected.

S.E.C. Comment #23.

23. We note your disclosure that you believe your cash and funds available under the amended credit facilities will be sufficient to meet your working capital and investment requirements for the next twelve months. Given that you have reached a maximum borrowing level on your credit facility and you are required to maintain at least \$25 million in your U.S. bank accounts, please enhance your future disclosures to discuss the impact these limitations may have on your working capital and investment requirements. Additionally, we note your disclosure on page 7 that the amended credit agreement limits your ability to purchase capital equipment. Please address what impact, if any, this will have on your operations.

Entegris Response to S.E.C. Comment # 23:

In future filings the Company will enhance its disclosure to discuss the impacts of the maximum borrowing level of the Company's credit facility and the requirement to maintain at least \$25 million in its U.S. bank accounts may have on the Company's working capital and investment requirements.

As of March 28, 2009, the Company held cash and cash equivalents equal to \$70 million in excess of the \$25 million to be retained in U.S. bank accounts under the terms of the amended credit facility. The Company believes that it is able to satisfy its working capital needs and fund its capital equipment purchases. Management does not anticipate that the \$16 million limit on capital expenditures will have an adverse effect on the Company's operations in 2009.

S.E.C. Comment #24.

24. We note your disclosure that the amended credit facility requires that the Company meet various financial covenants. While we note that you have disclosed the Company's EBITDA requirement under the amended credit facility, it is not clear whether you may be restricted under other financial covenants. If it is reasonably likely that you may not comply with a material covenant, please present, for your most significant and restrictive covenants, actual ratios and other actual amounts versus minimum/maximum ratios/amounts required as of each reporting date. Such presentation will allow investors to more easily understand your current ability to meet your financial covenants. It may also be necessary to show specific computations used to arrive at the actual ratios with corresponding reconciliations to US GAAP amounts, if applicable. See Sections 1.D and 1V.C of the SEC Interpretive Release No. 33-8350 and Question 10 of our FAQ Regarding the Use of Non-GAAP Financial Measures dated June 13, 2003.

Entegris Response to S.E.C. Comment # 24:

As noted, the Company is subject to various financial covenants under its amended credit facility, including EBITDA, capital expenditures and liquidity metrics that the Company has described in detail in its disclosure of the amended credit facility. The amended credit facility also contains two other financial metrics, which will not be operative until the second quarter of 2010. The other metrics consist of a fixed charge coverage ratio and a cash flow leverage ratio. In future filings, the Company will describe these additional financial metrics in detail, including the relevant thresholds for compliance under the terms of the amended credit facility. Please be advised that as of this date we do not believe that it is reasonably likely that the Company will not comply with a material covenant; if at the time of future filings our view on this matter changes then we will include the disclosure suggested by your comment, as appropriate.

S.E.C. Comment #25.

25. We note the description of the definition of disclosure controls and procedures. This description appears to be based on the definition of disclosure controls and procedures set forth in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. As described, however, this description does not fully conform to the definition set forth in those rules. In this regard, we note that the description does not indicate that the disclosure controls and procedures are designed to ensure that information is accumulated and communicated to management, including the principal executive and financial officers, as appropriate to allow timely decisions regarding required disclosure. Please revise accordingly in future filings.

Entegris Response to S.E.C. Comment # 25:

In future filings the Company will revise the description of disclosure controls and procedures to clarify that the disclosure controls and procedures are designed to ensure that information is accumulated and communicated to management, including the principal executive officer and the principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

S.E.C. Comment #26.

26. Please file the certifications exactly as set forth in Item 601(b)(31) of Regulation S-K. We note that in section 4(d) the following language is missing: “(the registrant’s fourth fiscal quarter in the case of an annual report).”

Entegris Response to S.E.C. Comment # 26:

Attached as Annex 1 to this Response are the forms of Exhibits 31.1 and 31.2 that will be included with all future Reports filed by the Company on Form 10-K or Form 10-Q with the appropriate form identified in paragraph 1 thereof.

Please be advised that the Company hereby confirms the following:

- the Company is responsible for the adequacy and accuracy of the disclosure in its filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and

- the Company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Based on our understanding of the requests made in your comments and on our responses and undertakings concerning future disclosures in this letter, we do not anticipate amending any past filings, but will make the enhanced disclosures discussed in this letter in future filings as appropriate.

Very truly yours,

ENTEGRIS, INC.

/s/ Gregory B. Graves

By: Gregory B. Graves
Executive Vice President & Chief Financial Officer

Annex 1

CERTIFICATIONS

I, Gideon Argov, certify that:

1. I have reviewed this Report on Form 10-__ 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 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 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) 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
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
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: _____, 20__

/s/ Gideon Argov
Gideon Argov
Chief Executive Officer
(Principal Executive Officer)

CERTIFICATIONS

I, Gregory B. Graves, certify that:

1. I have reviewed this Report on Form 10-__ 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 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 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) 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
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
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: ____, 20__

/s/ Gregory B. Graves

Gregory B. Graves
Chief Financial Officer
(Principal Financial Officer)