

February 9, 2010

Mr. Jeffrey Riedler
Assistant Director
Securities and Exchange Commission
Division of Corporate Finance
Washington, DC 20549

Re: Techne Corporation
Form 10-K for the Year Ended June 30, 2009
DEF 41A filed September 22, 2009
Supplemental response dated December 29, 2009
File No. 000-17272

Dear Mr. Riedler:

This letter is in response to the comment letter received by us dated January 28, 2010, concerning our response, dated December 29, 2009, to your comment letter dated December 15, 2009.

In connection with this response, the Company acknowledges that:

- the Company is responsible for the adequacy and accuracy of the disclosures in the filing;
- 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 federal securities laws of the United States.

COMMENT AND RESPONSE:

Definitive Proxy Statement

Performance-Based Bonus Plan

1. Comment: We note your response to comment 4 and reissue the comment in part. The Compensation Discussion and Analysis still does not disclose the budgeted revenues or the specific individual performance objectives the Executive Compensation Committee considers to determine your executive officers' bonus payments. Please provide us with draft disclosure for your 2010 proxy statement which provides the following

- A more detailed specific description and quantification of each of the specific individual and corporate goals and performance objectives;
- Confirmation that you will discuss the achievement of the objectives; and
- A discussion of how the level of achievement will affect the actual bonuses to be paid.

To the extent that these criteria are quantified, the discussion in your proxy statement should also be quantified.

Response: Revised disclosure for the Company's performance-based bonus plan to be included in the Company's 2010 proxy statement follows (subject to changes to the executive bonus plan, if any, when the final proxy is drafted in September 2010). The Company confirms it will discuss achievement of objectives by disclosing the percentage of accomplishment:

Performance-based bonus plan. Under the Company's Executive Officers Incentive Bonus Plan, each executive officer may earn a potential bonus of

up to 40% of his or her annual salary. The eligible bonus each executive officer could earn for fiscal 2010 was: Mr. Oland - \$101,640, Mr. Melsen - \$110,000 and Mr. Veronneau - \$67,000.

The Plan provides that up to 70% of the eligible bonus is based upon achieving the Company's budgeted revenue and earnings for the fiscal year and up to 30% of the eligible bonus is based upon achievement of qualitative personal goals set for each named executive officer. The Executive Compensation Committee believes this bonus plan focuses the executives on sustaining high quality revenue growth, bringing new products to market, increasing market share and expanding market presence, as well as balancing increased research and development with expense control.

The Company's Board of Directors reviews, discusses and recommends changes to a preliminary operating plan and budget for the next fiscal year at its annual April meeting. The final fiscal year operating plan and budget is discussed, reviewed and approved at the annual July meeting of the Board of Directors. The Board of Directors considers both historical and prospective factors, including the competitive market, economic trends, and changes in government regulations and funding, when establishing budgeted revenue and earnings for a fiscal year. Bonuses are awarded on a prorated basis if revenue and earnings achieved average between 85% and 100% of budgeted revenue and earnings. Budgeted revenues and earnings for fiscal 2010 were \$ _____ and \$ _____, respectively. Based upon actual revenues and earnings for fiscal 2010 of \$ _____ and \$ _____, respectively, the Executive Compensation Committee has determined that the Company's revenues and earnings were an average of ___% of budget for fiscal 2010. Therefore, each executive officer earned ___% (___% of budgeted revenues and earnings achieved times 70%) of his eligible bonus for fiscal 2010.

The personal goals for the named executive officers are generally qualitative in nature and position-specific. These personal goals are established annually by the Executive Compensation Committee taking into account each executive's responsibilities at the Company and the recommendations of the Chief Executive Officer as to the executives who report to him. Following each fiscal year end, the Executive Compensation Committee assesses the achievement of the personal goals by each named executive officer, which assessment includes the recommendations of the Chief Executive Officer as to the achievement of the personal goals of the executives who report to him.

The personal goals set for fiscal 2010 for Mr. Oland related to:

- accomplishment of the Company's strategic objectives;
- succession planning;
- leadership development; and
- personnel matters.

The Compensation Committee determined that Mr. Oland met ___% of his personal goals and, therefore, earned an additional ___% of his eligible bonus (___% of personal goals achieved times 30%).

The personal goals set for fiscal 2010 for Mr. Melsen related to:

- objectives within the information systems function, including transition of department leadership, improvement of service levels and reduction in consulting costs;
- the management of BiosPacific, Inc., the Company's sales subsidiary that services diagnostic customers, including succession planning and achievement of financials goals;
- objectives within the research and development function, including administrative support, analysis of economic opportunities and communication and enhancement of knowledge regarding Company products and processes; and
- objectives within the accounting and finance and facilities functions, including leadership development and operational efficiencies

The Compensation Committee, with input from the Chief Executive Officer, determined that Mr. Melsen met ___% of his personal goals and, therefore, earned an additional ___% of his eligible bonus (___% of personal goals achieved times 30%).

The personal goals set for fiscal 2010 for Mr. Veronneau related to the management of the Company's Hematology Division, including:

- the achievement of division revenue and pre-tax earnings and cost of goods targets of \$_____, \$_____, and \$_____, respectively;
- the introduction of new hematology products;
- the improvement of quality control programs;
- regulatory compliance; and
- personnel matters

The Compensation Committee, with input from the Chief Executive Officer of the Company, determined that Mr. Veronneau met ___% of his personal goals and, therefore, earned an additional ___% of his eligible bonus (___% of personal goals achieved times 30%).

The annual bonus is paid 50% in cash and 50% in stock options. The officer may elect to exchange all or a part of the cash portion of the bonus for additional stock options. If such an election is made, the officer is entitled to 1.7 times the value of the cash bonus in options. The number of options each executive officer receives is calculated based on the dollar value of the portion of the annual bonus to be paid in stock options divided by the closing share price at the date of grant. The options are granted under the Company's 1997 Incentive Stock Option Plan or 1998 Nonqualified Stock Option Plan and vest immediately with an exercise price equal to the closing price of the Company's stock on the date of grant. The stock option grant date is the date the Executive Compensation Committee determines the officer's aggregate bonus amount based on achievement of the budgeted revenue and earnings goals and the individual qualitative personal goals. For fiscal 2010, Mr. Oland earned ___% of his eligible bonus, or \$_____. He was paid a cash bonus of \$_____ and was granted stock options in fiscal 2011 for ___ shares of Company stock. For fiscal 2010, Mr. Melsen earned ___% of his eligible bonus or \$_____. He was paid a cash bonus of \$_____ and was granted stock options in fiscal 2011 for ___ shares of Company stock. For fiscal 2010, Mr. Veronneau earned ___% of his eligible bonus or \$_____. He was paid a cash bonus of \$_____ and was granted stock options in fiscal 2011 for ___ shares of Company stock.

We hope that we have adequately addressed your Comment Letter dated January 28, 2010.

Sincerely,

/s/ Thomas E. Oland

Thomas E. Oland
President and Chief Executive Officer

/s/ Gregory J. Melsen

Gregory J. Melsen
Chief Financial Officer

Cc: Travis Rabe, KPMG
Melodie Rose, Fredrikson & Byron