



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Mail Stop 3030

February 27, 2009

Via Facsimile and U.S. Mail

Lukas Braunschweiler
President, Chief Executive Officer and Director
Dionex Corporation
1228 Titan Way
Sunnyvale, California 94085

**Re: Dionex Corporation
Form 10-K for the Fiscal Year Ended June 30, 2008
Filed August 29, 2008
File No. 000-11250**

Dear Mr. Braunschweiler:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the Fiscal Year Ended June 30, 2008

Item 7. Management's Discussion and Analysis..., page 20

1. We note that your "Overview" section on page 20 repeats much information contained in the "Business" section of your annual report on Form 10-K. In your future filings, please add a balanced, executive-level discussion that identifies the most important themes or other significant matters with which management is concerned primarily in evaluating the company's financial condition and operating results. Discuss material business opportunities, challenges and risks, such as those presented by known material trends and uncertainties, on which the company's executives are most focused and the actions they are taking in response to them. For further guidance on the content and purpose of the discussion, see Interpretive Release No. 33-8350 on our website.

Item 11. Executive Compensation, page 55

Compensation Discussion and Analysis, page 16

2. We note the disclosure on page 17 of the proxy statement indicating that base salaries and amounts paid pursuant to the profit sharing plan and the management bonus plan were, in part, determined by: (1) taking into account all cash compensation based on a survey of market peers; and (2) comparing your compensation levels to those paid to executive officers of separations science and high technology companies of similar size with which you compete for talented executives. We also note the disclosure on page 19 that the total cash-based compensation for your named executive officers is comparable to the peer data. To the extent specific elements of compensation are tied to a benchmark, discuss where actual payments and awards fall within this targeted range, and to the extent that actual compensation was outside of this range, an explanation of the reasons for this. Refer to Item 402(b)(2)(xiv) of Regulation S-K.
3. In future filings, please identify the companies that comprise the peer group to which you compare the elements of your compensation packages. We see you disclosed four members of this group on page 23 of the proxy statement that you have incorporated by reference into your Form 10-K, but we note that the group included "many other" companies. Refer to Item 402(b)(2)(xiv) of Regulation S-K.
4. We note from the disclosure on pages 17 – 18 of your proxy statement that (1) you do not disclose the goals and targets your Committee considers in reviewing base salaries or that named executive officers must achieve to receive annual incentive awards under the Management Bonus Plan, and (2) these goals are established so that target attainment is not assured. In future filings, as applicable, please disclose your goals and objectives. To the extent you believe that disclosure of such information, on a historical basis, would result in competitive harm such that the information could be excluded under Instruction

4 to Item 402(b) of Regulation S-K, please provide us with a detailed explanation supporting your conclusion. Refer to Question 118.04 of the Regulation S-K Compliance and Disclosure Interpretations available on our website at <http://www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm>. To the extent that it is appropriate to omit specific goals and targets, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. In discussing how difficult or likely it will be to achieve these goals and targets, you should provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm.

5. With respect to your disclosure under the caption "Equity-based compensation" on page 19 of the proxy statement, we note minimal discussion and analysis as to how equity compensation was determined. In your future filings, as applicable, please include substantive analysis and insight into how your Compensation Committee made its equity-based compensation determinations with respect to each named executive officer. Refer to subparagraphs (b)(2)(iii) and (v) of Item 402 of Regulation S-K. For example, please discuss and analyze how the Compensation Committee determined the actual number of shares underlying the equity awards that were awarded to your named executive officers and how and why those awards varied among the named executive officers.

* * * *

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities and Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- The company is responsible for the adequacy and accuracy of the disclosure 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

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- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact David Burton, Staff Accountant, at (202) 551-3626 or Kevin L. Vaughn, Accounting Branch Chief, at (202) 551-3643 if you have questions regarding comments on the financial statements and related matters. Please contact Thomas Jones at (202) 551-3602 or me at (202) 551-3625 if you have questions on other comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Mary Beth Breslin
Senior Attorney