



DIVISION OF
CORPORATION FINANCE

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

November 29, 2012

Via E-mail

Mr. John R. Peeler
Chief Executive Officer
Veeco Instruments, Inc.
Terminal Drive
Plainview, New York 11803

**Re: Veeco Instruments, Inc.
Form 10-K for the Year Ended December 31, 2011
Filed February 22, 2012
Form 8-K
Filed November 15, 2012
File No. 000-16244**

Dear Mr. Peeler:

We have reviewed your response letter dated November 16, 2012 and have the following comment. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to this comment, we may have additional comments.

Form 8-K filed on November 15, 2012

Exhibit 99.1

1. We note that you filed a Form 12b-25 related to your Form 10-Q for the period ended September 30, 2012 due to the fact you are evaluating the timing of the revenue recognition for the sale of certain of your Metal Organic Chemical Vapor Deposition (MOCVD) systems and related upgrades to those systems. Please explain to us in detail the nature of the referenced revenue recognition transactions and the results of your evaluation of the transactions. Please discuss and provide us with references to the specific authoritative U.S. GAAP that you are using when performing the evaluations. Provide to us an estimate of when you intend to file your September 30, 2012 Form 10-Q. We may have further

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comments upon reviewing your response, your September 30, 2012 Form 10-Q and any other documents you file prior to the completion of this review.

You may contact Tara Harkins, Staff Accountant, at (202) 551-3639 or Jay Webb, Reviewing Accountant, at (202) 551-3603 if you have questions regarding these comments. In this regard, do not hesitate to contact me at (202) 551-3643.

Sincerely,

/s/ Jay Webb "for"

Kevin L. Vaughn
Accounting Branch Chief