



DIVISION OF
CORPORATION FINANCE

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

June 13, 2011

Via E-mail

Brian R. Kahn
Chief Executive Officer
API Technologies Corp.
4705 S. Apopka Vineland Rd., Suite 210
Orlando, FL 32819

**Re: API Technologies Corp.
Post-Effective Amendment No. 6 to Registration Statement on Form S-3
Filed May 20, 2011
File No. 333-136586**

Dear Mr. Kahn:

We have limited our review of your registration statement to those issues we have addressed in our comment.

Please respond to this letter by amending your registration statement or providing the requested information. Where you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this comment, we may have additional comments.

1. Please provide us your analysis regarding whether you are eligible to conduct this offering on Form S-3.

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 the information the Securities Act of 1933 and all applicable Securities Act rules require. 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.

Notwithstanding our comment, before we can declare the amended registration statement effective, the company should provide us with a letter, acknowledging that:

Brian R. Kahn
API Technologies Corp.
June 13, 2011
Page 2

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Gabriel Eckstein at (202) 551-3286 or Mary Beth Breslin, Senior Attorney, at (202) 551-3625 with any questions.

Sincerely,

/s/ Mary Beth Breslin for

Russell Mancuso
Branch Chief

cc (via email): Leslie J. Weiss, Esq.
Barnes & Thornburg LLP