



DIVISION OF
CORPORATION FINANCE

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

July 23, 2012

Via E-Mail

Mr. Dean L. Cash
Chief Executive Officer
ATEL Growth Capital Fund 8, LLC
600 California Street, 6th Floor
San Francisco, California 94108

**Re: ATEL Growth Capital Fund 8, LLC
Amendment No. 2 to Registration Statement on Form S-1
Filed July 5, 2012
File No. 333-178629**

Dear Mr. Cash:

We have reviewed your registration statement and have the following comments.

General

1. Since you appear to qualify as an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act, please disclose on your prospectus cover page that you are an emerging growth company, and revise your prospectus to:
 - Describe how and when a company may lose emerging growth company status;
 - Briefly describe the various exemptions that are available to you, such as exemptions from Section 404(b) of the Sarbanes-Oxley Act of 2002 and Section 14A(a) and (b) of the Securities Exchange Act of 1934; and
 - State your election under Section 107(b) of the JOBS Act:
 - If you have elected to opt out of the extended transition period for complying with new or revised accounting standards pursuant to Section 107(b), include a statement that the election is irrevocable; or
 - If you have elected to use the extended transition period for complying with new or revised accounting standards under Section 102(b)(1), provide a risk factor explaining that this election allows you to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies. Please state in your risk factor that, as a result of this election, your financial statements may not be comparable to companies that comply with public company effective dates. Include a similar statement in your critical accounting policy disclosures.

In addition, consider describing the extent to which any of these exemptions are available to you as a Smaller Reporting Company.

2. Please supplementally provide us with any written materials that you or anyone authorized to do so on your behalf provides in reliance on Section 5(d) of the Securities Act to potential investors that are qualified institutional buyers or institutional accredited investors. Similarly, please supplementally provide us with any research reports about you that are published or distributed in reliance upon Section 2(a)(3) of the Securities Act of 1933 added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating or will participate in your offering.

Financial Statements

ATEL Growth Capital Fund 8, LLC

General

3. Your disclosures on page 78 indicate that your year end is December 31. In this regard, please provide an audited balance sheet date as of December 31, 2011. Please also provide an audited statement of operations, changes in member's capital and cash flows from inception through December 31, 2011. Please correspondingly revise the periods of your unaudited interim financial statements so that they are for the period from January 1, 2012 through March 31, 2012. Please refer to Rules 8-02 and 8-03 of Regulation S-X.

Note 2 – Summary of Significant Accounting Policies

Subsequent Events, page F-7

4. You evaluated subsequent events through July 3, 2012 for purposes of presenting the March 31, 2012 financial statements and related footnotes. Please also disclose whether July 3, 2012 is the date the financial statements were issued or available to be issued. Refer to ASC 855-10-50-1(b). In a similar manner, please revise your subsequent event disclosures for AGC Managing Member, LLC on page F-12.

AGC 8 Managing Member, LLC

General

5. Please provide an audited balance sheet date as of December 31, 2011. Please refer to Rule 8-02 of Regulation S-X.

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Supplemental Sales Literature

6. We note your response to comment 1 of our letter dated February 17, 2012. Please send us a copy of the revised Powerpoint presentation containing the “Originations by Industry” pie chart.

You may contact Nudrat Salik, Staff Accountant at (202) 551-3692 or, in her absence, Rufus Decker, Accounting Branch Chief at (202) 551-3769 if you have questions regarding comments on the financial statements and related matters. Please contact Sherry Haywood, Staff Attorney at (202) 551-3345 or, in her absence me at (202) 551-3760 with any other questions.

Sincerely,

/s/ Pamela Long

Pamela Long
Assistant Director

Cc: Via E-mail
Paul J. Derenthal, Esq.