



DIVISION OF
CORPORATION FINANCE
Mail Stop 7010

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

May 30, 2007

Via U.S. Mail

Mr. Freddie Kotek, Chief Executive Officer
Atlas America Series 27-2006 L.P.
311 Rouser Road
Moon Township, Pennsylvania 15108

**Re: Atlas America Series 27-2006
Registration Statement on Form 10
Filed April 30, 2007
File No. 0-52615**

Dear Mr. Kotek:

We have reviewed your filing and have the following comments. We have not completed the engineering review. Upon completion, we will send additional engineering comments, if any, in a separate letter. Where indicated, we think you should revise your document 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 or may not 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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

General

1. The Form 10 registration statement will automatically become effective 60 days from April 30, 2007, the date of first filing. Upon effectiveness, you will become subject to the reporting requirements of the Securities Exchange Act of 1934.

2. Where we raise comments pertaining to one section and they also relate to disclosure in another section, please make parallel changes to all affected disclosure. This will eliminate the need for us to repeat similar comments.
3. Please update the financial information throughout the filing. We refer you to Article 3-12(d) of Regulation S-X, which provides that the age of financial statements included in Form 10 should not be more than 145 days at the date the filing becomes effective.

Business, page 1

4. We note that you have provided a chart delineating the organization and affiliations of Atlas America, Inc. on page 44. Include a new chart or expand the current chart to reflect the ownership structure and direct affiliations of the registrant as well. Also move the chart(s) closer to the beginning of this section.
5. Provide tabular disclosure of the participants' and the managing general partner's contributions.

Oil and Natural Gas Properties, page 4

6. We note that you "will pay a reasonable charge for services performed directly by our managing general partner or its affiliates." Describe the services that may be directly provided to you by the managing general partner and its affiliates. Also discuss how the "reasonable charge" will be determined.

Sale of Natural Gas and Oil Production, page 5

7. Please revise your disclosure to clarify up to what percentage of your gross sales price you may pay for gathering services. We note that your managing general partner may receive up to 13% of your gross sales price for gathering services. However, under certain circumstances, it appears that you may be required to pay a greater percentage. If there is no ceiling on the amount that you may be charged or required to pay for these services, disclose that explicitly.

Government Regulation, page 10

Regulation of Production, page 10

8. Disclose in this section or elsewhere as appropriate any material costs you have incurred or expect to incur as a result of federal, state, and local regulation of natural gas and oil production.

Risk Factors, page 13

9. Eliminate the suggestion in the introductory paragraph that you have not included all material risks in this section.
10. Revise to eliminate language that mitigates the risk. Examples include clauses that begin or precede “however” and “although.” Similarly, disclosure regarding minimal harm you experienced from a risk or how you intend to mitigate or eliminate a risk does not belong in the Risk Factors section, but may appear elsewhere in your document as appropriate. Please revise accordingly.
11. Ensure that the risk factors you include address risks that are specific to you and your operations. Remove risk factors that may apply to any registrant. We note, for example, the risk factor entitled “We expect to incur costs in connection with Exchange Act compliance...” on page 23.
12. We note that you have entered into hedging arrangements. Please describe in a risk factor how those arrangements may negatively impact your financial situation and results of operations.

Security Ownership of Certain Beneficial Owners and Management, page 34

13. Please confirm to us that none of the identified individuals beneficially own any of your securities and that there is no owner with more than 5% beneficial ownership.

Directors and Executive Officers, page 35

14. If material, please disclose the amount reimbursed to Atlas America for management and administrative services and expenses incurred on behalf of the managing general partner. Quantify in dollar terms the amounts referenced in the first paragraph.

Officers, Directors, and Other Key Personnel of Managing General Partner

15. Please disclose the amount of time that each named individual has devoted and will devote to your operations, to the extent known or readily determinable. Also revise the sketches as necessary to eliminate any gaps with regard to time in the past five years, and specify the date and year of “formation” of the entities you cite in the sketch for Mr. Jones.
16. If material, rather than indicating that the information will be provided “on request,” expand the disclosure regarding the management of the named affiliates to provide the referenced biographical information. For example, it appears that

the information regarding Atlas Management would be meaningful, given the arrangements described at pages 47-50

Remuneration of Officers and Directors, page 47

17. We note that officers and directors of the managing general partner will not receive “any direct remuneration or other compensation” from the company. Please expand to explain how the officers and directors will be compensated for the services they provide to you. Also provide all the disclosure that Item 6 of Form 10 requires. We may have additional comments.

Certain Relationships and Related Transactions, page 50

18. Revise to clarify your statement that “we contributed \$1,245,300, and estimate our total capital contribution to be \$24,394,100.” Also make clear in each case who is making and who is receiving the contributions.

Description of Registrant’s Securities to be Registered, page 53

19. Revise to eliminate the suggestion that you only discuss “some” of the partnership provisions, and instead make clear that you describe all the material provisions.

Closing Information

As appropriate, please amend your filings and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendments to expedite our review. Please furnish a cover letter with your amendments 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 amendments and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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;

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- 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 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 Tracie Towner at (202) 551-3744 or Jenifer Gallagher at (202) 551-3706 if you have questions regarding the financial statements and related issues. Direct any questions regarding the engineering comments to James Murphy at (202) 551-3703. Please contact Carmen Moncada-Terry at (202) 551-3687 or in her absence, Timothy Levenberg, Special Counsel, at (202) 551-3707 with any other questions.

Sincerely,

H. Roger Schwall
Assistant Director

Cc: T. Towner
J. Gallagher
J. Murphy
T. Levenberg
C. Moncada-Terry