



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

DIVISION OF CORPORATION FINANCE
MAIL STOP 7010

August 23, 2007

Mark S. Berg
Pioneer Southwest Energy Partners, LP
5205 N. O'Connor Blvd. Suite 200
Irving, Texas 75309

**Re: Pioneer Southwest Energy Partners L.P.
Registration Statement on Form S-1
Filed July 26, 2007
File No. 333-144868**

Dear Mr. Berg:

We have reviewed your filing and have the following comments. 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 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.

General

1. Where comments on a section 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.
2. Update the document to provide the latest available information. For example, please update the information regarding the status of your application for listing on the New York Stock Exchange and if applicable, any credit agreement that you have entered into or are likely to enter into.
3. We note that you omit information required by Regulation S-K, not all of which is related to information that may be omitted as specified by Rule 430A of Regulation C. For example, consistent with the requirements of Item 501(b)(3) of Regulation S-K, revise to include the proposed price range. Additionally,

information is missing on pages 10, 66, 101, 104 and 146. We may have additional comments once we review any additional disclosure.

4. Please update the financial statements and related disclosure included in the prospectus.
5. We note that the general partner has the right to call and purchase all common units. Please advise us whether you will comply with the tender offer rules and file a Schedule TO when or if this right is exercised, if applicable. If you believe an exemption from the tender offer rules would be available, please explain why.
6. Please file all omitted exhibits, including opinions of counsel, as soon as practicable. Also file all material contracts as exhibits. In this regard, please file the indemnity agreement between Pioneer Natural Resources Company (Pioneer) and the company that was executed as a result of the volumetric production payment associated with the properties you will be acquiring. Ensure that your disclosure is appropriately revised to address the material terms of all such omitted exhibits. Please be advised that we will need sufficient time to review these materials prior to effectiveness.

Cover page

7. We direct you to Release No. 33-6900 which is applicable to offerings of limited partnership interests. The disclosure on the cover page is lengthy. Please revise to more clearly and concisely identify the principal risks disclosed. Additionally, make reference to the risk associated with the unitholders' limited voting rights.

Summary, page 1

8. Given your stated distribution policy, provide further clarity regarding how you intend to balance the need to acquire more properties in your area of operations with the planned cash distribution goal of \$0.30 per quarter. Rather than stating that you will reinvest a "sufficient" amount of your cash flow in acquisitions, revise to indicate a general or estimated percentage of cash flow that would be set aside for such acquisitions, to the extent known. For example, disclose that in estimating the minimum amount of EBITDAX that you must generate to pay your initial quarterly distribution to the unitholders for each quarter for the twelve months ended September 30, 2008, you have assumed that you will incur capital expenditures of \$17 million for acquisitions in order to allow you to maintain a flat production profile. Provide similar quantitative disclosure in your risk factor on page 18 regarding your need to make acquisitions.

9. Clarify the relative importance to your plan of operations and the impact to your distribution policy, if any, depending on how you choose to fund your acquisitions (i.e. cash flow from operations or through the use of external financing such as a credit facility).
10. You place significant emphasis on your accretive growth strategy as a competitive strength. In this regard, while we acknowledge your disclosure that Pioneer has no legal obligation to allow you the opportunity to purchase additional assets in your area of operations, you also preface your statement with disclosure that suggests Pioneer's "significant ownership stake" in the company will lead it to offer you additional assets. Please revise to provide more balanced disclosure.
11. Much of the disclosure in this section is focused on the activities of Pioneer and its historical operations on a combined basis. Insufficient disclosure is provided regarding your historical and planned operations based on analysis of the contributions to revenues of the assets you will acquire upon consummation of the offering. Please revise your disclosure accordingly.
12. Eliminate duplicative disclosure in the summary. We note repetitive disclosure on pages 1 and 3 regarding the size of Pioneer as an operator in the Spraberry field and on pages 2 and 3 regarding Pioneer's intent to use your company as the primary vehicle to monetize and acquire mature properties in your area of operations.
13. Please provide objective, verifiable support for the following statements:
 - [a]ccording to the Energy Information Administration, the Spraberry field is the seventh largest field in the United States;" and
 - "...based on 2006 production, Pioneer is the largest operator in the Spraberry field..."

To expedite our review, please clearly mark each source to highlight the applicable portion or section containing the statistic and cross-reference it to the appropriate location in your prospectus. Also, supplementally tell us whether the source of each statistic is publicly available without cost or at a nominal expense. If the source is not publicly available at nominal or no cost, it appears that consent of the third party to the use of the information in the prospectus and to the reference to that firm should be obtained and filed as an exhibit. Please see Rule 436 of Regulation C and Item 601(b)(23) of Regulation S-K for additional guidance. Alternatively, you may adopt these statements as your own.

Summary of Risk Factors, page 3

Risks Related to Our Business, page 3

14. Supplement your disclosure in the last bullet point to more accurately reflect the risk associated with your dependence on the operator as disclosed on page 23. In this regard, you should reference your inability to change operators and the other restrictions you are subject to pursuant to the Omnibus Agreement.

Risk Factors, page 16

15. Revise your discussion throughout this section to more concisely present the risks that are particularly relevant to you and your operations. Remove excessive and duplicative disclosure. In this regard, we note that you include many risk factors that are almost over a page in length or more. Moreover, duplicative risk factor disclosure has been provided, for example, pertaining to your proposed hedging activities and need to make substantial acquisitions. Please revise your disclosure accordingly.
16. Revise the heading of your risk factors and ensure that they properly capture the risks being disclosed. For example, the risk associated with the limitations imposed on your operations by owners of the properties on which your wells are situated is not reflected in the heading. Note also on page 18 in the second risk factor, the heading should be revised to further emphasize the potential risk associated with your inability to obtain capital or financing.

Non-GAAP Financial Measures, page 13

17. We note EBITDAX excludes exploration and abandonment expenses and other non-cash charges related to the hedge related activity and equity-based compensation, which are recurring items. Please revise your disclosure to clearly address why these amounts have been excluded from the measure and why the resulting measure is more useful than net income in an investor's understanding of your business. Please refer to Questions 8 and 9 of the Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures issued by the staff on June 13, 2003 and SAB Topic 14:G for further guidance.

Risk Related to Our Business, page 16

“Our initial assets....,” page 17

18. Please revise to disaggregate from the discussion, the separate risks disclosed. For example, the risk associated with your lack of ownership of the properties from which your production is derived is distinct from the risk associated with the migration of reservoir fluids.

Risks Related to an Investment in Us, page 28

“Cost reimbursements to Pioneer....,” page 29

19. You disclose that even if Pioneer did not incur a cash tax expense, you may still be required to reimburse Pioneer for certain taxes you would have otherwise owed. To provide further context to the disclosure, please provide, if known, a reasonable estimate of the amounts that you would have had to pay to Pioneer based on the financial results and tax position as of December 31, 2006.

Cash Distribution Policy and Restrictions on Dividends, page 40

20. Please expand the tables presented on pages 43 and 45 to include the calculations of your debt covenants under the new credit facility to demonstrate if you would have been or expect to be in compliance as of December 31, 2006, March 31, 2006 and September 30, 2008.
21. Please expand your disclosure in sub note (a) to the table presented on page 45 to clarify how the \$4 million excess cash available is calculated.

Capital Expenditures and Expenses, page 49

22. We note you have forecasted approximately \$17 million in growth capital expenditures for the twelve months ended September 30, 2008. Tell us how you have considered and included maintenance capital expenditures in the table on page 45. In addition, please clarify note(c) to the table on page 43 to identify if these expenditures were incurred for growth capital purposes only. If so, in a similar manner, please expand these disclosures to address how you have accounted for maintenance capital expenditures in the table presented on page 43.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 56

Production Expenses and General and Administrative Expenses, page 59

23. Please supplement the disclosure and specify the dollar amount represented by the Council of Petroleum Accountants' Societies or COPAS fee.

Results of Operations for Pioneer Southwest Energy Partners, L.P. Predecessor, page 62

Comparison of the three years ended December 21, 2006 and the three months ended March 31, 2006 and 2007, page 62

Production, page 63

24. Explain the reasons for the decreases in production in the year ended December 31, 2005 relative to December 31, 2006. Also explain the reason for any increase or decrease in production for the recently ended period as compared to the same period last year. Provide similar explanatory disclosure for increases or decreases in the other categories within your results of operations, such as the G&A expenses, for the recently ended period.

Liquidity and Capital Resources

Volumetric Production Payment Indemnity, page 67

25. We note that virtually all the wells that will be contributed and sold to you will remain subject to the volume production payment (VPP) commitment. It is unclear why the production from the wells would not be required to meet the VPP obligation. In addition, your disclosures in Note 7 on page F-34 state virtually all the properties to be contributed and sold to the Partnership will remain subject to the VPP obligation. If the wells are required to meet the obligation, please revise your disclosure to quantify the impact this commitment could have on your liquidity, providing a sensitivity analysis if applicable. Please disclose the historic impact this commitment has had on your predecessor.

Critical Accounting Estimates, page 68

26. Please revise the discussion of your critical accounting estimates to provide an analysis of your specific sensitivity to change based on outcomes that are reasonably likely to occur and have a material effect. In addition, please ensure each accounting estimate discussion addresses the material implications of the uncertainties that are associated with the underlying methods, assumptions and estimates. Please refer to FRC Section 501.14 for further guidance

Business, page 72

Competitive Strengths, page 74

27. You indicate in the summary that you intend to use external financing to increase your production and proved reserves and, in the risk factor discussion, disclose the risks associated with reliance on debt for future acquisitions. Similarly, on page 66, you disclose your intention to enter into a credit facility. The last bullet point under this heading should be placed within the context of the aforementioned statements. Please revise your disclosure accordingly.

Our Oil, NGL, and Gas Data, page 75

28. While you indicate that you will focus on the acquisition of developed properties, you also disclose that you may acquire undeveloped properties and midstream assets. Please clarify the anticipated timeframe within which you intend to pursue the latter type of acquisitions.

Delivery Commitments, page 79

29. Please clarify throughout the statement that “virtually all” the wells contributed and sold to you in connection with your formation are burdened by the VPP. Quantify the percentage of wells, if any, that are not subject to the VPP.

Principal Customers and Marketing Arrangements, page 79

30. Please file your agreements with Plains Marketing, L.P., ONEOK Inc., and TEPPCO Crude Oil as exhibits to the registration statement, or tell us why these are not required to be filed.

Management, page 86

31. Rather than disclosing that you anticipate the executive officers will devote “significantly less than the majority of their time to your business in the foreseeable future,” please provide a reasonable estimate of the amount of time that you anticipate each of the executive officers of the general partner and Pioneer will spend on your affairs relative to the business of Pioneer.

Pioneer's Compensation Methodology, page 90

32. You indicate that you will reimburse Pioneer for expenses including "salary, bonus, [and] incentive compensation." It would appear that you should provide the disclosure required by Item 402 of Regulation S-K to the extent that the individuals listed under "Directors and Executive Officers" are compensated for their services to the issuer.
33. In addition, revise your discussion to place greater emphasis on the relevance of the compensatory policies of Pioneer to your overall expenditures given that a portion of such costs may be allocable to you. In this regard, consistent with the requirements of Item 402(b)(1)(v) of Regulation S-K, discuss whether any of the incentive compensation targets that were established for 2007 are financial or operational targets relating to the assets that you will acquire. Moreover, to the extent any of the officers performing services for you will be assessed based on their "individual performance" or delivery of services specifically to you, we would expect to see disclosure regarding specific aspects of individual performance that would be considered in determining the appropriate amount of the bonus payment. See Item 402(b)(2)(vii) of Regulation S-K.

Certain Relationships and Related Party Transactions, page 102

34. Please disclose who is responsible for approving related party transactions. Further, in this regard, describe the policies and procedures for the review, approval or ratification of transactions with related persons that are reportable under Item 404(b) of Regulation S-K. The description must include the material features of these policies and procedures that are necessary to understand them. Also, identify any transactions required to be reported pursuant to Item 404(a) of Regulation S-K where the policies and procedures did not require review, approval or ratification or where such policies and procedures were not followed. Finally, to the extent that no such procedures or policies were in place at the time of the referenced transactions, revise to make this clear. See Item 404(b) of Regulation S-K.
35. As noted in a prior comment, please file all material contracts between the related parties referenced in this section. We may have further comment following our review.

Administrative Services Agreement, page 103

36. Please provide an estimate, expressed as a percentage of the total dollar amount you anticipate paying to Pioneer and its subsidiaries, that is attributable to compensatory expenditures paid to the executive officers who render services to you and who also serve as officers and director to Pioneer Natural Resources USA, Inc.
37. Please revise to clarify overall how the general partner will be reimbursed for charges incurred on your behalf, including how charges will be allocated amongst the parties. Discuss provisions, if any, which would ensure that the reimbursable expenses that the general partner allocates to you are determined in good faith.
38. Provide further context regarding how the cost of \$1.08 per BOE of your production was established as the appropriate reference point for determining the anticipated fee to be paid. In this regard, we note reference to the possible adjustment of the amount or methodology of the fee determination based on annual reviews with the Pioneer GP board of directors. Please supplement your disclosure to provide further insight into the factors that would be considered in making the adjustments. Indicate whether the entire board or only independent members of the board of the GP will be involved in the review process.

Note 3. Summary of Significant Accounting Policies
Allocation of costs, page F-21

39. Revise to disclose, if true, that those expenses specifically identified as applicable to the Predecessor have been included in its financial statements. We understand other costs are required to be allocated using a reasonable method as they are unable to be specifically identified. Please refer to SAB Topic 1:B, question 2.

Note 7. Commitments and Contingencies, page F-34

40. Please expand your disclosures to identify the amount of barrels of oil equivalent that were subject to the VPP and the related percentage of your annual production for each period presented in your financial statements. In addition, we note Pioneer will reimburse the Partnership for the value of production subject to the VPP obligation. Please disclose how the value of the production subject to the VPP obligation will be determined and how and when it will be recognized in your financial statements. For example, clarify if the cash payments will be recognized upon transfer of title, risks and rewards under the VPP obligation as revenue or at a later date. Please make similar revisions to your disclosures in the March 31, 2007 financial statements.

Engineering Comments

Summary, page 1

Summary Reserve and Operating Data, page 15

41. We note your statement, “The pro forma proved reserves as of December 31, 2006 for the Partnership Properties were audited by NSAI, our independent petroleum engineers,” and the audit letter from your third party engineer in Appendix C. Please amend your document to:
- Disclose the differences between a reserve audit and a financial audit.
 - Address the procedures used by the third party engineer to arrive at the opinion that your reserves are “in the aggregate, reasonable and have been prepared in accordance with generally accepted petroleum engineering and evaluation principles.”
 - Provide to us a listing of “generally accepted petroleum engineering and evaluation principles” and cite a reference for it in your document.
 - Discuss the procedures you follow to reconcile differences between your estimates and those performed by the third party engineer.
 - Disclose the numerical difference between your estimates and those of your third party engineer.
42. We note your statement, “The pro forma standardized measure and proved reserves are less than the respective historical amounts reflected in the above table as of December 31, 2006 because we will be charged COPAS fees beginning at the closing of this offering, instead of the direct internal costs of Pioneer, which results in higher lease operating expenses.” Please amend your document to disclose the figures, total and per BOE, for the historical “direct internal costs of Pioneer” and the COPAS fees.
43. Please revise your presentation of proved reserves to include the degree of depletion for these properties, i.e. the proved reserves divided by the sum of proved reserves and cumulative production.

Risk Factors, page 16

Our estimated proved reserves are based on many assumptions..... page 21

44. We note your statement, “For example, if oil prices at December 31, 2006 had decreased by \$5.00 per barrel, then our pro forma standardized measure of proved reserves as of December 31, 2006 would have decreased by \$29.7 million, from \$288.0 million to \$258.3 million.” Please expand this to include the effect of this price change on your proved reserve estimates.

Cash Distribution Policy and Restrictions on Distributions, page 40

Estimated Cash Available to Pay Distributions, page 45

45. Please furnish to us a spreadsheet rendition – in digital and hard copy format - of all the details of your EBITDAX calculation projected for the 12 months ending September 30, 2008. Reconcile the gas price per MMBTU associated with your hedges with the gas price per MCF used in your future production schedules. Please include a future production schedule for your total disclosed proved reserves with at least the first five years by month.

Please direct these items to:

U.S. Securities & Exchange Commission
100 F Street, N.E.
Washington, DC 20549-7010
Attn: Ronald M. Winfrey

Business, page 72

Our Production, Price and Cost History, page 77

46. Please revise your presentation of historical product prices to disclose the effects of your predecessor’s hedging program.

Closing Comments

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment 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 filings to be certain that the filing includes all information required under the Securities Act of 1933 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- 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.

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 connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

Mark S. Berg
Pioneer Southwest Energy Partners, LP
August 23, 2007
Page 13 of 13

You may contact Robert Carroll at (202) 551-3362 or, in his absence, Shannon Buskirk at (202) 551-3717 if you have questions regarding comments on the financial statements and related matters. Please contact Ron Winfrey, Petroleum Engineer, at (202) 551-3704 with respect to questions pertaining to the engineering comments. You may contact Mellissa Campbell Duru at (202) 551-3757 or, in her absence, me at (202) 551-3611 with any other questions.

Sincerely,

Anne Nguyen Parker
Branch Chief

cc: William Finnegan, Esq. (by facsimile)
R. Winfrey
S. Buskirk
A. Parker
B. Carroll
M. Duru