



DIVISION OF
CORPORATION FINANCE

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

January 3, 2014

Via E-mail

Scott McNeill
Chief Financial Officer
RSP Permian, Inc.
3141 Hood Street, Suite 701
Dallas, Texas 75219

**Re: RSP Permian, Inc.
Amendment No. 2 to Registration Statement on Form S-1
Filed January 2, 2014
Supplemental Correspondence dated January 2, 2014
File No. 333-192268**

Dear Mr. McNeill:

We have reviewed your amendment and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply 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 these comments, we may have additional comments.

Amendment No. 2 to Registration Statement on Form S-1

General

1. We note that the form of Amended and Restated Certificate of Incorporation filed as Exhibit 3.1 includes an exclusive forum provision. Please revise your prospectus to disclose the impact of such provision, if material.

Business, page 86

Our Properties, page 93

Recent Activity, page 95

2. We note your statement at page 95 under “Recent and Future Activity” regarding your drilling and completion plans for the remainder of 2013. Please update such disclosure.

Exhibits

3. Please ensure that you file all exhibits, such as the legality and tax opinions, as the staff may have comments upon review. Also ensure that all material contracts include all schedules and exhibits. For example, we note that the agreements filed as Exhibits 10.5 and 10.7 reference missing schedules and exhibits. Please refile such agreements to include all missing schedules and exhibits. Refer to Item 601(b)(10) of Regulation S-K.
4. In response to prior comment 6 in our letter to you dated December 30, 2013, you indicate that the form of Amended and Restated Holdco LLC Agreement filed as Exhibit 10.7 is not a material contract required to be filed pursuant to Item 601(b)(10)(iii) of Regulation S-K. However, the staff believes that, unless an exclusion applies, any document governing the terms of a compensatory plan, contract, or arrangement is a material contract pursuant to Item 601(b)(10)(iii). Please explain whether any exclusion applies to the Amended and Restated Holdco LLC Agreement.

Supplemental Correspondence dated January 2, 2014

General

5. We note the number of shares to be offered by RSP Permian Holdco, LLC pursuant to this registration statement, and note RSP Permian Holdco’s relationship to the registrant. In that regard, we note the following:
 - RSP Permian Holdco will own 45.1% of your common stock before the offering;
 - RSP Permian Holdco will obtain such shares as partial consideration for all of its interests in RSP Permian, LLC; and
 - RSP Permian Holdco is owned by Production Opportunities II, LP, an entity affiliated with Natural Gas Partners, certain members of your management team and certain of your employees.

Please revise your filing to identify RSP Permian Holdco, LLC as a statutory underwriter. Refer to Securities Act Section 2(a)(11).

Use of Proceeds, page 51

6. We note that you intend to revise your use of proceeds disclosure. Please revise your filing to disclose the approximate amount of the offering proceeds intended for each specified purpose. In that regard, you have not provided a break-down of such proceeds intended for the reduction of amounts drawn under your revolving credit agreement, funding of a portion of your capital expenditure program, and general corporate purposes. See Item 504 of Regulation S-K. In addition, please present your use of proceeds disclosure in tabular format.

Notes to Unaudited Pro Forma Combined Financial Statements, page F-8

Note 2 – Pro Forma Adjustments (Continued), page F-10

7. We note pro forma adjustments (1) and (2) made to Oil and natural gas properties relating to the Collins and Wallace Contributions and the ACTOIL NPI Repurchase. Please expand your disclosure to address whether the dollar amounts of these adjustments are expected to differ from the estimated fair value of such contributed properties to be recognized in accordance with FASB ASC 805.
8. We note from the disclosure on page F-12 that pro forma adjustment (3) is an estimate of the “change in long-term deferred tax liabilities for temporary differences between the historical cost basis and tax basis of the Company’s assets and liabilities as the result of its change in tax status to a subchapter C Corporation.” Please expand your disclosure to explain why this adjustment results in an increase to Oil and natural gas properties.
9. Please expand the disclosure related to pro forma adjustment (4) to identify the separate components of the cash payments to certain of the existing investors and to address the business purpose for these cash payments.

Unaudited Historical Combined Financial Statements

Combined Statements of Operations, page F-23

10. We note your disclosure stating that pro forma income per common share is calculated based on the number of shares of common stock attributable to the Predecessor to be issued in your initial public offering. Please provide us with a detailed calculation supporting the number of weighted average pro forma shares outstanding.

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 comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company 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.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Jennifer O'Brien, Staff Accountant, at (202) 551-3721 or Ethan Horowitz, Accounting Branch Chief, at (202) 551-3311 if you have questions regarding comments on the financial statements and related matters. You may contact Ronald Winfrey, Petroleum Engineer, at (202) 551-3704 with questions about engineering comments. Please contact Caroline Kim, Attorney-Adviser, at (202) 551-3878 or Laura Nicholson, Attorney-Adviser, at (202) 551-33584 with any other questions.

Sincerely,

/s/ A.N. Parker *for*

H. Roger Schwall
Assistant Director

cc: Douglas E. McWilliams
Vinson & Elkins LLP