

October 29, 2010

H. Christopher Owings
Assistant Director
United States Securities and Exchange Commission
100 F. Street, N.E.
Washington, D.C. 20549

Re: DCP Midstream Partners LP
Form 10-K for the Fiscal Year Ended December 31, 2009
Filed March 11, 2010
Forms 10-Q for the Fiscal Quarters Ended March 31, 2010 and June 30, 2010
Filed May 10, 2010 and August 10, 2010
File No. 001-32678

Dear Mr. Owings:

Set forth below are the responses of DCP Midstream Partners, LP, a Delaware limited partnership (the “**Partnership**,” “**we**,” “**us**” or “**our**”), to comments received from the staff of the Division of Corporation Finance (the “**Staff**”) of the Securities and Exchange Commission (the “**Commission**”) by letter dated October 18, 2010, with respect to the review of the Partnership’s Annual Report on Form 10-K for the fiscal year ended December 31, 2009 initially filed with the Commission on March 11, 2010 (the “**Form 10-K**”), and the Partnership’s Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2010 and June 30, 2010 filed May 10, 2010 and August 10, 2010, respectively (the “**Form 10-Q’s**”), File No. 001-32678 (the “**Reports**”). For your convenience, each response is prefaced by the exact text of the Staff’s corresponding comment in bold text.

* * * * *

Form 10-K for the Fiscal Year Ended December 31, 2009

Total Contractual Cash Obligations and Off-Balance Sheet Obligations, page 78

1. **Comment: We note your response to comment three from our letter dated September 27, 2010. Please tell us why you initially identified these obligations as off-balance sheet obligations and why you now believe they are not off-balance sheet obligations as described in Item 303(a)(4) of Regulation S-K and defined in The Division of Corporation Finance Financial Reporting Manual Section 9230.**

Response: In previous filings we described our operating leases and purchase obligations as off-balance sheet items based on our belief that this disclosure provided the reader with information related to the nature of the commitments and our U.S GAAP financial statement presentation. Operating leases and purchase obligations are obligations that are not recorded on our balance sheets. We do not believe, however, that these routine transactions meet the definition of “off-balance sheet obligations” as described in Item 303(a)(4) of Regulation S-K and defined in The Division of Corporation Finance Financial Reporting Manual Section 9230 because:

1. these obligations do not represent guarantee contracts and, as a result, lack the characteristics set forth in ASC 460-10-15-4;
2. these obligations do represent retained or contingent interests in assets transferred to an unconsolidated entity to serve as a credit, liquidity or market risk support for the entity;
3. these obligations would not be accounted for as derivative instruments, and
4. these obligations do not arise out of a variable interest entity as defined in ASC 810-15-10.

Item 11. Executive Compensation, page 152

Outstanding Equity Awards at Fiscal Year-End, page 162

2. **Comment: We note your response to comment nine from our letter dated September 27, 2010. Please tell us why you now believe that your 2009 assumed performance goals should have been calculated at the maximum level and why initially you believed that your 2009 assumed performance goal was calculated at 100%.**

Response: Pursuant to Instruction 3 to Item 402(f)(2) of Regulation S-K we are required to disclose payout values for unvested awards based upon the higher of threshold performance goals, or the next higher performance measure based upon the previous fiscal year’s actual performance. As result of the three year performance period, the 100% performance assumption represented the level at which we expected the performance condition to be satisfied upon vesting. The 100% performance assumption is consistent with our estimate of the amount of unrecognized compensation expense reflected in our financial statements as of, and for the period ended, December 31, 2009.

Further interpretation based upon the Regulation S-K Compliance and Disclosure Interpretation Question 122.01 indicates that if payout is based upon performance to occur over more than one year that the performance should be measured over the last completed fiscal years over which performance is measured. Based on this additional guidance our interpretation of the assumed performance goals for 2009 should have been calculated at the maximum level, or 200% for purposes of disclosure preparation pursuant to Item 402(f)(2) of Regulation S-K.

(c) Exhibits, page 184

3. **Comment: We note your response to comment 12 from our letter dated September 27, 2010. Please tell us which exhibits you believe should have been filed as an exhibit under Item 601(b)(2) of Regulation S-K and why.**

Response: We believe the following exhibits should have more appropriately been filed under Item 601(b)(2) instead of Item 601(b)(10) because they relate to plans of acquisition:

Exhibit 10.6 – Contribution Agreement, dated October 9, 2006 relates to the acquisition by the Partnership of all of the limited liability company member interests in Gas Supply Resources, LLC. This should have been listed as an Exhibit 2 item and classified as a “plan of acquisition” under Item 601(b)(2).

Exhibit 10.08 – Purchase and Sale Agreement dated March 7, 2007 relates to the acquisition by the Partnership of certain properties and rights of Anadarko Gathering Company and Anadarko Energy Services Company. This should have been listed as an Exhibit 2 item and classified as a “plan of acquisition” under Item 601(b)(2).

Exhibit 10.12 – Contribution and Sale Agreement dated May 21, 2007 relates to the acquisition by a subsidiary of the Partnership of all of the outstanding membership interests of Momentum Energy Group, LLC. This should have been listed as an Exhibit 2 item and classified as a “plan of acquisition” under Item 601(b)(2).

Exhibit 10.14 – Contribution Agreement dated May 23, 2007 relates to the acquisition by the Partnership of a 25% interest in our East Texas joint venture and our interest in Discovery Producer Services LLC. This should have been listed as an Exhibit 2 item and classified as a “plan of acquisition” under Item 601(b)(2).

Exhibit 10.23 – Contribution Agreement dated February 24, 2009 relates to the acquisition by the Partnership of an additional 25.1% interest in our East Texas joint venture. This should have been listed as an Exhibit 2 item and classified as a “plan of acquisition” under Item 601(b)(2).

Item 601(b)(2) provides, in part, that “[s]chedules (or similar attachments) to these exhibits shall not be filed unless such schedules contain information which is material to an investment decision and which is not otherwise disclosed in the agreement or the disclosure document.” In the case of each document listed above, the Partnership has determined that the information contained in the schedules omitted was not material to an investment decision or an understanding of the material terms and conditions of the related agreement.

The Partnership undertakes to provide to the commission (supplementally), upon request, copies of omitted exhibits or schedules to these agreements, and, accordingly, respectfully concludes that a complete version of the listed agreements should not be required to be filed. In future filings in which any of these agreements is listed in the exhibit index, the Partnership will number the exhibit as an Exhibit 2 item.

* * * * *

In addition, we acknowledge the Staff's comment that we are responsible for the accuracy and adequacy of the disclosures made. We formally acknowledge that:

- The adequacy and accuracy of the disclosure in filings is the responsibility of DCP Midstream Partners, LP.
- Staff comments or changes to disclosure in response to Staff comments do not foreclose the Commission from taking any action with respect to the filings.
- DCP Midstream Partners, LP 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.

Please feel free to contact Mr. Michael S. Richards, Vice President and General Counsel who can be reached at (303) 633-2912.

Very truly yours,

DCP Midstream Partners L.P.

By: DCP Midstream GP, LP
Its: General Partner

By: DCP Midstream GP, LLC
Its: General Partner

By: /s/Angela A. Minas
Angela A. Minas
Its: Chief Financial Officer

H. Christopher Owings
Assistant Director
United States Securities and Exchange Commission
October 29, 2010
Page 5

Enclosures

cc: Mara Ransom, Commission Legal Branch Chief
Robert Errett, Commission Staff Attorney
Michael S. Richards, DCP Midstream Partners, LP
Lucy Schlauch Stark, Holland & Hart LLP