UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3/A (POST-EFFECTIVE AMENDMENT NO. 2) REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

DCP MIDSTREAM PARTNERS, LP

(Exact name of registrant as specified in charter)

Delaware

(State or other jurisdiction of incorporation or organization)

03-0567133

(I.R.S. Employer Identification Number)

370 17th Street, Suite 2500 Denver, Colorado 80202 (303) 633-2900

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Michael S. Richards, Esq. Vice President & General Counsel 370 17th Street, Suite 2500 Denver, Colorado 80202 (303) 633-2900

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to: Lucy Stark, Esq. Amy L. Bowler, Esq. Holland & Hart LLP 555 17th Street, Suite 3200 Denver, Colorado 80202 (303) 295-8000

Approximate date of commencement of proposed sale to the public: This Form S-3/A (Post-Effective Amendment No. 2) to the registration statement will deregister the approximately \$27 of securities previously registered for issuance under the registration statement which remain unsold.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: o

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: o If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. o If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction LD filed to register additional securities or

•	t to Rule 413(b) under the Securities Act, check the following	8	securities or
	gistrant is a large accelerated filer, an accelerated filer, a non- "accelerated filer" and "smaller reporting company" in Rule		company. See the
Large accelerated filer	x	Accelerated filer	
Non-accelerated filer	\square (Do not check if a smaller reporting company)	Smaller reporting company	

EXPLANATORY NOTE - DEREGISTRATION OF SECURITIES

This Form S-3/A (Post-Effective Amendment No. 2) is being filed for the purpose of deregistering the approximately \$27 of unsold common units of DCP Midstream Partners, LP, a Delaware limited partnership, or the Registrant, that were previously registered for issuance under the registration statement on Form S-3 (File No. 333-175047) filed with the Securities and Exchange Commission on June 21, 2011, amended on July 27, 2011, effective on August 4, 2011, and further amended on August 2, 2013. In accordance with the undertaking made by the Registrant pursuant to Item 512(a)(3) of Regulation S-K promulgated under the Securities Act of 1933, as amended, to remove from registration by means of a post-effective amendment any securities which remain unsold at the termination of the offering subject to the registration statement, the Registrant hereby deregisters the approximately \$27 of common units previously registered for issuance under the registration statement which remain unsold.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Form S-3/A (Post-Effective Amendment No. 2) to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Denver, State of Colorado, on September 4, 2013.

DCP MIDSTREAM PARTNERS, LP

By: DCP MIDSTREAM GP, LP,

its general partner

By: DCP MIDSTREAM GP, LLC,

its general partner

By: /s/ Wouter T. van Kempen

> Wouter T. van Kempen **Chief Executive Officer**

Pursuant to the requirements of the Securities Act of 1933, this Form S-3/A (Post-Effective Amendment No. 2) to the registration statement has been signed by the following in the capacities and on the dates indicated.

Signature	Title	Date	
/s/ Wouter T. van Kempen Wouter T. van Kempen	Chief Executive Officer (Principal Executive Officer)	September 4, 2013	
/s/ William S. Waldheim William S. Waldheim	President and Director	September 4, 2013	
/s/ Rose M. Robeson Rose M. Robeson	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	September 4, 2013	
* Gary D. Watkins	Vice President and Controller (Principal Accounting Officer)	September 4, 2013	
* Thomas C. O'Connor	Chairman of the Board and Director	September 4, 2013	
* Paul F. Ferguson, Jr.	Director	September 4, 2013	
* Frank A. McPherson	Director	September 4, 2013	
*	Director	September 4, 2013	
Thomas C. Morris *	Director	September 4, 2013	
* By: /s/ Michael S. Richards Michael S. Richards Attorney-in-fact			