

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

POST EFFECTIVE AMENDMENT NO. 1

TO

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

DUNCAN ENERGY PARTNERS L.P.

(Exact name of registrant as specified in its charter)

DEP Unit Purchase Plan
2010 Duncan Energy Partners L.P. Long-Term Incentive Plan
(Full title of the plan)

Delaware
(State or other jurisdiction of
incorporation or organization)

1100 Louisiana, 10th Floor
Houston, Texas 77002
(713) 381-6500
(Address, including zip code, and telephone
number, including area code, of registrant's
principal executive offices)

20-5639997
(I.R.S. Employer
Identification Number)

Stephanie C. Hildebrandt
1100 Louisiana, 10th Floor
Houston, Texas 77002
(713) 381-6500
(Name, address, including zip code, and telephone
number, including area code,
of agent for service)

With a copy to:
David C. Buck
Andrews Kurth LLP
600 Travis, Suite 4200
Houston, Texas 77002
(713) 220-4200

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company.)

DEREGISTRATION OF SECURITIES

On February 11, 2010, Duncan Energy Partners L.P., a Delaware limited partnership (the "Partnership"), filed a registration statement on Form S-8 (Registration No. 333-164852) (the "Registration Statement") with the Securities and Exchange Commission (the "Commission"), which was deemed effective upon filing. The Registration Statement registered the offer and sale of 500,000 common units issuable pursuant to the DEP Unit Purchase Plan and 500,000 common units issuable pursuant to the 2010 Duncan Energy Partners L.P. Long-Term Incentive Plan (collectively, the "Registered Securities").

Pursuant to the Agreement and Plan of Merger, dated as of April 28, 2011, by and among Enterprise Products Partners L.P. ("Enterprise"), Enterprise Products Holdings LLC ("Enterprise GP"), which is the general partner of Enterprise, EPD MergerCo LLC ("MergerCo"), which is a wholly owned subsidiary of Enterprise, the Partnership and DEP Holdings, LLC, MergerCo merged with and into the Partnership, with the Partnership surviving the merger as a wholly owned subsidiary of Enterprise, on September 7, 2011 (the "Merger").

In connection with the Merger, and in accordance with an undertaking made by the Partnership in the Registration Statement, the Partnership hereby removes from registration by means of this Post-Effective Amendment No. 1 any of the Registered Securities which remain unsold under the Registration Statement as of the date hereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, Duncan Energy Partners L.P. certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Post-Effective Amendment No. 1 to the Registration Statement on Form S-8 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Houston, State of Texas, on September 8, 2011.

DUNCAN ENERGY PARTNERS L.P.

By: DEP Holdings, LLC, as General Partner

By: /s/ Michael A. Creel
Michael A. Creel
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Post-Effective Amendment No. 1 to the Registration Statement on Form S-8 has been signed by the following persons in the capacities indicated on September 8, 2010.

<u>Name</u>	<u>Title (Position with DEP Holdings, LLC)</u>
<u>/s/ Michael A. Creel</u> Michael A. Creel	Director, President and Chief Executive Officer (Principal Executive Officer)
<u>/s/ W. Randall Fowler</u> W. Randall Fowler	Director, Executive Vice President and Chief Financial Officer (Principal Financial Officer)
<u>/s/ Michael J. Kneseck</u> Michael J. Kneseck	Senior Vice President, Controller and Principal Accounting Officer