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

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ENTERPRISE PRODUCTS PARTNERS L.P.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

76-0568219

(I.R.S. Employer Identification No.)

1100 Louisiana St., Suite 1000 Houston, Texas 77002

(Address of principal executive offices and zip code)

EPCO, Inc. 2006 TPP Long-Term Incentive Plan

(Full title of the plans)

Richard H. Bachmann, Esq. 1100 Louisiana St., Suite 1000 Houston, Texas 77002 (713) 381-6500

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

Large accelerated filer $\ensuremath{\square}$

Accelerated filer o

Non-accelerated filer o
(Do not check if a smaller reporting company)

Smaller reporting company o

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered (1)	Proposed maximum offering price per share (2)	Proposed maximum aggregate offering price (2)	Amount of registration fee
Common units representing limited				
partner interests (3)	922,758	\$29.64	\$27,350,548	\$1,527

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, there is also being registered such additional number of common units as may be required because of events such as recapitalizations, stock dividends, stock splits or similar transactions effected without the receipt of consideration that increases the number of outstanding common units.
- (2) Estimated solely for the purpose of determining the amount of the registration fee in accordance with Rule 457(c) and (h) under the Securities Act of 1933, as amended, and based on the average of the high and low prices of the common units as reported by the NYSE on October 20, 2009.
- (3) This Registration Statement on Form S-8 relates to 922,758 common units representing limited partner interests of the registrant under the EPCO, Inc. 2006 TPP Long-Term Incentive Plan to be issued to holders of outstanding awards issued by TEPPCO Partners, L.P. ("TEPPCO"), including (based on a 1.24 exchange ratio) options to purchase 593,960 common units and other equity awards in the form of 328,798 unit appreciation rights, which awards have been assumed by the registrant.

INTRODUCTORY STATEMENT

Enterprise Products Partners L.P. (the "Partnership") is filing this registration statement on Form S-8 relating to its common units representing limited partner interests in the Partnership (the "Partnership Common Units"), that may be offered and sold pursuant to the EPCO, Inc. 2006 TPP Long-Term Incentive Plan (the "Plan").

On October 26, 2009, pursuant to an Agreement and Plan of Merger (the "Merger Agreement") dated as of June 28, 2009, by and among the Partnership, Enterprise Products GP, LLC, a Delaware limited liability company and the general partner of the Partnership ("Enterprise GP"), Enterprise Sub B LLC, a Delaware limited liability company and a wholly owned subsidiary of the Partnership ("Merger Sub B"), TEPPCO Partners, L.P., a Delaware limited partnership ("TEPPCO"), and Texas Eastern Products Pipeline Company, LLC, a Delaware limited liability company and the general partner of TEPPCO, among other things, Merger Sub B was merged with and into TEPPCO, with TEPPCO surviving the merger as a wholly owned subsidiary of the Partnership (the "Merger"). Under the terms of the Merger Agreement, all outstanding TEPPCO units, other than 3,645,509 TEPPCO units (the "Designated Units") owned by an affiliate of EPCO, Inc., a private company controlled by Dan L. Duncan, were cancelled and converted into the right to receive Partnership Common Units based on an exchange ratio of 1.24 Partnership Common Units per TEPPCO unit (the "Exchange Ratio"). The Designated Units were converted, based on the Exchange Ratio, into the right to receive 4,520,431 Class B Units of the Partnership.

At the effective time of the Merger, (i) each vested and unvested outstanding option to acquire TEPPCO units was assumed by the Partnership and converted into an option to purchase Partnership Common Units, based on the terms of the Merger Agreement and after applying the Exchange Ratio with respect to both the number of shares issuable under the options and the related exercise price therefor and (ii) each outstanding TEPPCO unit appreciation right granted to a TEPPCO employee pursuant to the Plans was assumed by the Partnership and converted into Partnership Common Unit appreciation rights, based on the terms of the Merger Agreement and after applying the Exchange Ratio with respect to the number of TEPPCO unit appreciation rights.

PART I. INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Note: The document(s) containing the employee benefit plan information required by Item 1 of Form S-8 and the statement of availability of registrant information and any other information required by Item 2 of Form S-8 will be sent or given to participants as specified by Rule 428 under the Securities Act of 1933, as amended (the "Securities Act"). In accordance with Rule 428 and the requirements of Part I of Form S-8, such documents are not being filed with the Securities and Exchange Commission (the "Commission") either as part of this registration statement or as prospectuses or prospectus supplements pursuant to Rule 424 under the Securities Act. The registrant shall maintain a file of such documents in accordance with the provisions of Rule 428. Upon request, the registrant shall furnish to the Commission or its staff a copy or copies of all of the documents included in such file.

PART II. INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The Partnership incorporates by reference in this registration statement the following documents and information previously filed with the Commission:

- 1. The Partnership's Annual Report on Form 10-K for the fiscal year ended December 31, 2008 and filed by the Partnership with the Commission on March 2, 2009 (retrospectively adjusted by the Partnership's Current Report on Form 8-K as filed with the Commission on July 8, 2009 for the adoption of SFAS 160 and EITF 07-4);
- 2. The Partnership's Quarterly Reports on Form 10-Q for the quarters ended March 31, 2009 and June 30, 2009, filed by the Partnership with the Commission on May 11, 2009 and August 6, 2009, respectively;
- 3. The Partnership's Current Reports on Form 8-K filed on January 12, 2009, January 16, 2009, January 23, 2009, February 5, 2009, March 12, 2009 (retrospectively adjusted by the Partnership's Current Report on Form 8-K as filed with the Commission on July 8, 2009 for the adoption of SFAS 160), April 2, 2009, April 21, 2009, May 11, 2009, June 5, 2009, June 10, 2009, June 29, 2009, July 8, 2009, August 10, 2009, September 4, 2009, September 18, 2009, September 21, 2009, September 23, 2009, September 30, 2009, October 5, 2009, October 8, 2009, October 15, 2009 and October 23, 2009 (only to the extent the information contained in each of these Form 8-Ks has been filed and not furnished); and
- 4. The description of the Partnership's common units contained in the Partnership's Registration Statement on Form 8-A/A (File No. 001-14323) as filed by the Partnership with the Commission on May 15, 2007, and any amendment or report filed for the purpose of updating that description.

All documents filed with the Commission by the Partnership pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, (excluding any information furnished pursuant to Item 2.02 and Item 7.01 on any current report on Form 8-K) subsequent to the date of this registration statement and prior to the filing of a post-effective amendment to this registration statement which indicates that all securities offered have been sold, or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be a part hereof from the date of filing of such documents.

Any statement contained herein or in a document incorporated or deemed to be incorporated herein by reference shall be deemed to be modified or superseded for purposes of this registration statement to the extent that a statement contained herein or in any subsequently filed document that also is, or is deemed to be, incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

Item 4. Description of Securities.

Not Applicable.

Item 5. Interests of Named Experts and Counsel.

Not Applicable.

Item 6. Indemnification of Directors and Officers.

Section 17-108 of the Delaware Revised Uniform Limited Partnership Act empowers a Delaware limited partnership to indemnify and hold harmless any partner or other person from and against all claims and demands whatsoever. The Partnership's partnership agreement provides that the Partnership will indemnify (i) Enterprise GP, (ii) any departing general partner, (iii) any person who is or was an affiliate of Enterprise GP or any departing general partner, (iv) any person who is or was a member, partner, officer director, employee, agent or trustee of Enterprise GP or any departing general partner or any affiliate of Enterprise GP or any departing general partner or any affiliate of any such person, any affiliate of Enterprise GP or any fiduciary or trustee of another person (each, a "Partnership Indemnitee"), to the fullest extent permitted by law, from and against any and all losses, claims, damages, liabilities (joint or several), expenses (including, without limitation, legal fees and expenses), judgments, fines, penalties, interest, settlements and other amounts arising from any and all claims, demands, actions, suits or proceedings, whether civil, criminal, administrative or investigative, in which any Partnership Indemnitee may be involved, or is

threatened to be involved, as a party or otherwise, by reason of its status as a Partnership Indemnitee; provided that in each case the Partnership Indemnitee acted in good faith and in a manner that such Partnership Indemnitee reasonably believed to be in or not opposed to the best interests of the Partnership and, with respect to any criminal proceeding, had no reasonable cause to believe its conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere, or its equivalent, shall not create an assumption that the Partnership Indemnitee acted in a manner contrary to that specified above. Any indemnification under these provisions will be only out of the assets of the Partnership, and Enterprise GP shall not be personally liable for, or have any obligation to contribute or lend funds or assets to the Partnership to enable it to effectuate, such indemnification. The Partnership is authorized to purchase (or to reimburse Enterprise GP or its affiliates for the cost of) insurance against liabilities asserted against and expenses incurred by such persons in connection with the Partnership's activities, regardless of whether the Partnership would have the power to indemnify such person against such liabilities under the provisions described above.

Section 18-108 of the Delaware Limited Liability Company Act provides that, subject to such standards and restrictions, if any, as are set forth in its limited liability company agreement, a Delaware limited liability company may, and shall have the power to, indemnify and hold harmless any member or manager or other person from and against any and all claims and demands whatsoever. The limited liability company agreement of Enterprise GP provides for the indemnification of (i) present or former members of the Board of Directors of Enterprise GP or any committee thereof, (ii) present or former officers, employees, partners, agents or trustees of the Enterprise GP or (iii) persons serving at the request of Enterprise GP in another entity in a similar capacity as that referred to in the immediately preceding clauses (i) or (ii) (each, a "General Partner Indemnitee") to the fullest extent permitted by law, from and against any and all losses, claims, damages, liabilities, joint or several, expenses (including reasonable legal fees and expenses), judgments, fines, penalties, interest, settlements and other amounts arising from any and all claims, demands, actions, suits or proceedings, whether civil, criminal, administrative or investigative, in which any such person may be involved, or is threatened to be involved, as a party or otherwise, by reason of such person's status as a General Partner Indemnitee; provided, that in each case the General Partner Indemnitee acted in good faith and in a manner which such General Partner Indemnitee believed to be in, or not opposed to, the best interests of the Enterprise GP and, with respect to any criminal proceeding, had no reasonable cause to believe such General Partner Indemnitee's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere, or its equivalent, shall not create a presumption that the General Partner Indemnitee acted in a manner contrary to that specified above. Any indemnification pursuant to these provisions shall be made only out of the assets of Enterprise GP. Enterprise GP is authorized to purchase and maintain insurance, on behalf of the members of its Board of Directors, its officers and such other persons as the Board of Directors may determine, against any liability that may be asserted against or expense that may be incurred by such person in connection with the activities of Enterprise GP, regardless of whether Enterprise GP would have the power to indemnify such person against such liability under the provisions of its limited liability company agreement.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to directors, officers or persons controlling the Partnership or Enterprise GP as set forth above, the Partnership and Enterprise GP have been informed that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 7. Exemption from Registration Claimed.

Not Applicable.

Item 8. Exhibits.

The following documents are filed as a part of this registration statement or incorporated by reference herein:

Exhibit No.	-	Description
3.1*	_	Fifth Amended and Restated Agreement of Limited Partnership of Enterprise Products Partners L.P., dated effective as of August 8, 2005 (incorporated by reference to Exhibit 3.1 to Form 8-K filed August 10, 2005).
		II-2

Exhibit No.		Description
3.2*	_	First Amendment to Fifth Amended and Restated Partnership Agreement of Enterprise Products Partners L.P., dated as of December 27, 2007 (incorporated by reference to Exhibit 3.1 to Form 8-K/A filed January 3, 2008).
3.3*	_	Second Amendment to Fifth Amended and Restated Partnership Agreement of Enterprise Products Partners L.P., dated as of April 14, 2008 (incorporated by reference to Exhibit 10.1 to Form 8-K filed April 16, 2008).
3.4*	_	Third Amendment to the Fifth Amended and Restated Partnership Agreement of Enterprise Products Partners L.P., dated as of November 6, 2008 (incorporated by reference to Exhibit 3.5 to Form 10-Q filed on November 10, 2008).
3.5*	_	Fifth Amended and Restated Limited Liability Company Agreement of Enterprise Products GP, LLC, dated as of November 7, 2007 (incorporated by reference to Exhibit 3.2 to Form 10-Q filed November 8, 2007).
3.6*	_	First Amendment to Fifth Amended and Restated Limited Liability Company Agreement of Enterprise Products GP, LLC, dated as of November 6, 2008 (incorporated by reference to Exhibit 3.7 to Form 10-Q filed on November 10, 2008).
4.1*	_	EPCO, Inc. 2006 TPP Long-Term Incentive Plan (filed as Exhibit B to the definitive proxy statement on Schedule 14A of TEPPCO Partners, L.P. (Commission File No. 1-10403) filed on September 11, 2006 and incorporated herein by reference).
4.2*	_	Form of TPP Employee Unit Appreciation Right Grant of Texas Eastern Products Pipeline Company, LLC under the EPCO, Inc. 2006 TPP Long-Term Incentive Plan (filed as Exhibit 10.1 to the Current Report on Form 8-K of TEPPCO Partners, L.P. (Commission File No. 1-10403) filed on May 25, 2007 and incorporated herein by reference).
4.3*	_	Form of TPP Director Unit Appreciation Right Grant of Texas Eastern Products Pipeline Company, LLC under the EPCO, Inc. 2006 TPP Long-Term Incentive Plan (filed as Exhibit 10.8 to Form 10-Q of TEPPCO Partners, L.P. (Commission File No. 1-10403) for the quarter ended March 31, 2007 and incorporated herein by reference).
4.4*	_	Form of TPP Employee Option Grant, as amended, of Texas Eastern Products Pipeline Company, LLC under the EPCO, Inc. 2006 TPP Long-Term Incentive Plan (filed as Exhibit 10.2 to Form 10-Q of TEPPCO Partners, L.P. (Commission File No. 1-10403) for the quarter ended September 30, 2007 and incorporated herein by reference).
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5.1	_	Opinion of Andrews Kurth LLP as to the validity of the securities being registered.
23.1	_	Consent of Deloitte & Touche LLP.
23.3	_	Consent of Andrews Kurth LLP (included in Exhibit 5.1).
24.1	_	Power of Attorney (set forth in the signature page contained in Part II of this Registration Statement).

^{*} Incorporated herein by reference as indicated.

Item 9. Undertakings.

- (a) The undersigned registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of a prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, *however*, That paragraphs (a)(1)(i) and (a)(1(ii) of this section do not apply if the registration statement is on Form S-8, and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described under Item 6 above, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant 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 registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Houston, State of Texas, on October 26, 2009.

ENTERPRISE PRODUCTS PARTNERS, L.P.

By: Enterprise Products GP, LLC, its general partner

By: /s/ Michael J. Knesek

Michael J. Knesek

Senior Vice President, Controller and Principal

Accounting Officer of Enterprise Products GP, LLC

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Michael A. Creel, Richard H. Bachmann and W. Randall Fowler and each of them, any of whom may act without joinder of the others, his or her lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any or all amendments (including post-effective amendments) to this registration statement and to file the same with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto such attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all said attorneys-in-fact and agents, and each of them, or the substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed below by the following persons in the capacities and on the dates indicated below.

Signature	Title (within Enterprise Products GP, LLC)	Date
/s/ Dan L. Duncan	Director and Chairman of the Board	October 26, 2009
Dan L. Duncan		
/s/ Michael A. Creel	Director, President and Chief	October 26, 2009
Michael A. Creel	Executive Officer	
	(Principal Executive Officer)	
/s/ W. Randall Fowler	Director, Executive Vice President and	October 26, 2009
W. Randall Fowler	Chief Financial Officer	
	(Principal Financial Officer)	
/s/ Richard H. Bachmann	Director, Executive Vice President and	October 26, 2009
Richard H. Bachmann	Chief Legal Officer and Secretary	
/s/ A.J. Teague	Director, Executive Vice President and	October 26, 2009
A.J. Teague	Chief Commercial Officer	
G		

Signature	Title (within Enterprise Products GP, LLC)	Date
/s/ Michael J. Knesek	Senior Vice President, Controller and	October 26, 2009
Michael J. Knesek	Principal Accounting Officer	
Dr. Ralph S. Cunningham	Director	
E. William Barnett	Director	
Charles M. Rampacek	Director	
Rex C. Ross	Director	

EXHIBIT INDEX

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^{*} Incorporated herein by reference as indicated.



600 Travis, Suite 4200 Houston, Texas 77002 713.220.4200 Phone 713.220.4285 Fax andrewskurth.com Austin Beijing Dallas Houston London Los Angeles New York The Woodlands Washington, DC

October 26, 2009

Enterprise Products Partners L.P. 1100 Louisiana Street, 10th Floor Houston, Texas 77002

Ladies and Gentlemen:

We have acted as counsel to Enterprise Products Partners L.P., a Delaware limited partnership (the "<u>Partnership</u>"), in connection with the preparation of the registration statement on Form S-8 (the "<u>Registration Statement</u>") to be filed with the Securities and Exchange Commission (the "<u>SEC</u>") in connection with the registration by the Partnership under the Securities Act of 1933, as amended (the "<u>Securities Act</u>"), of the offer and sale of up to 922,758 common units representing limited partner interests of the Partnership (the "<u>Units</u>"), for issuance under the EPCO, Inc. 2006 TPP Long-Term Incentive Plan (the "<u>Plan</u>").

As the basis for the opinion hereinafter expressed, we have examined: (i) originals, or copies certified or otherwise identified, of: (a) the Plan; (b) the Certificate of Limited Partnership and Fifth Amended and Restated Agreement of Limited Partnership, in each case as amended to date (the "Partnership Agreement"); (c) the Certificate of Formation and Fifth Amended and Restated Limited Liability Company Agreement of Enterprise Products GP, LLC, a Delaware limited liability company and the general partner of the Partnership ("Enterprise GP"), in each case as amended to date; (d) certain resolutions of the Board of Directors of the Enterprise GP; (e) the Agreement and Plan of Merger dated as of June 28, 2009, by and among the Partnership, Enterprise GP, Enterprise Sub B LLC, a Delaware limited liability company and a wholly owned subsidiary of the Partnership, TEPPCO Partners, L.P., a Delaware limited partnership, and Texas Eastern Products Pipeline Company, LLC, a Delaware limited liability company and the general partner of TEPPCO (the "Merger Agreement"); (f) such other instruments and documents as we have deemed necessary or advisable for the purposes of this opinion; and (ii) such statutes, including the Delaware Revised Uniform Limited Partnership Act (the "DRULPA") and the Delaware Limited Liability Company Act (the "DLLCA"), and regulations as we have deemed necessary or advisable for the purposes of this opinion. We have not independently verified any factual matter relating to this opinion.

Enterprise Products Partners L.P. October 26, 2009 Page 2

In making our examination, we have assumed and have not verified that all signatures on documents examined by us are genuine, the authenticity of all documents submitted to us as originals and the conformity with the original documents of all documents submitted to us as certified, conformed or photostatic copies.

Based on the foregoing and on such legal considerations as we deem relevant and subject to the qualifications and limitations set forth below, we are of the opinion that the issuance of the Units by the Partnership has been duly authorized and, when issued and delivered in accordance with the terms of the Merger Agreement and the Plan and the related agreements thereunder, as applicable, the Units will be validly issued, fully paid (to the extent required under the Partnership Agreement) and non-assessable (except as such nonassessability may be affected by Sections 17-303 and 17-607 of the Delaware LP Act).

We express no opinion other than as to the federal laws of the United States of America, the DRULPA and the DLLCA (including the statutory provisions, all applicable provisions of the Delaware Constitution and reported judicial decisions interpreting the foregoing).

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement. In giving this consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the SEC issued thereunder. This opinion is expressed as of the date hereof, and we disclaim any undertaking to advise you of any subsequent changes of the facts stated or assumed herein or any subsequent changes in applicable law.

Very truly yours,

/s/ Andrews Kurth LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement of Enterprise Products Partners L.P. on Form S-8 of (i) our report dated March 2, 2009 (July 6, 2009 as to the effects of the adoption of SFAS 160 and EITF 07-4 and the related disclosures in Notes 1 and 3), relating to the consolidated financial statements of Enterprise Products Partners L.P. and subsidiaries (which report expressed an unqualified opinion and included an explanatory paragraph concerning the retrospective adjustments related to the adoption of SFAS 160 and EITF 07-4) appearing in the Current Report on Form 8-K of Enterprise Products Partners L.P. dated July 8, 2009, (ii) our report dated March 2, 2009 relating to the effectiveness of Enterprise Products Partners L.P. for the year ended December 31, 2008, and (iii) our report dated March 2, 2009 (July 6, 2009 as to the effects of the adoption of SFAS 160 and the related disclosures in Notes 1 and 3), relating to the consolidated balance sheet of Enterprise Products GP, LLC and subsidiaries at December 31, 2008 (which report expressed an unqualified opinion and included an explanatory paragraph concerning the retrospective adjustments related to the adoption of SFAS 160), appearing in the Current Report on Form 8-K of Enterprise Products Partners L.P. dated July 8, 2009.

/s/ DELOITTE & TOUCHE LLP

Houston, Texas October 23, 2009