

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

Form S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

TARGA RESOURCES PARTNERS LP

(Exact name of registrant as specified in its charter)

Delaware
*(State or other jurisdiction of
incorporation or organization)*

4922

*(Primary Standard Industrial
Classification Code Number)*

65-1295427
(L.R.S. Employer Identification Number)

**1000 Louisiana, Suite 4300
Houston, Texas 77002
(713) 584-1000**

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

**Rene R. Joyce
Chief Executive Officer
1000 Louisiana, Suite 4300
Houston, Texas 77002
(713) 584-1000**

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

Copies to:

**David P. Oelman
Christopher S. Collins
Vinson & Elkins LLP
1001 Fannin Street, Suite 2500
Houston, Texas 77002
(713) 758-2222**

**Douglass M. Rayburn
Baker Botts L.L.P.
2001 Ross Avenue
Dallas, Texas 75201
(214) 953-6500**

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

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, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) 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. File No. 333-146436

If this Form is a post-effective amendment filed pursuant to Rule 462(c) 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.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) 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.

Calculation of Registration Fee

Title of Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Aggregate Offering Price(1)(2)	Amount of Registration Fee(3)
Common units representing limited partner interests	1,150,000	\$30,900,500	\$949

(1) Includes 150,000 common units which may be sold upon exercise of the underwriters' option to purchase additional units.

(2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended (the "Securities Act"). In accordance with Rule 462(b) promulgated under the Securities Act of 1933, as amended, an additional amount of securities having a proposed maximum aggregate offering price of no more than 20% of the maximum aggregate offering price of the securities eligible to be sold under the related Registration Statement on Form S-1 (File No. 333-146436), as amended, is registered hereby.

(3) The registrant previously registered an aggregate of \$412,562,500 in common units on the Registration Statement on Form S-1 (File No. 333-146436), for which a filing fee of \$12,666 was previously paid upon the filing of such Registration Statement. An additional fee of \$949 is included with this filing to register an additional \$30,900,500 amount of common units.

The Registration Statement shall become effective upon filing with the Securities and Exchange Commission in accordance with Rule 462(b) under the Securities Act of 1933, as amended.

EXPLANATORY NOTE AND INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

Targa Resources Partners LP, a Delaware limited partnership, is filing this registration statement with respect to the registration of an additional 1,150,000 common units pursuant to Rule 462(b) promulgated under the Securities Act of 1933, as amended (the "Securities Act"). This registration statement relates to the public offering of our common units contemplated by the Registration Statement on Form S-1 (File No. 333-146436), as amended (the "Prior Registration Statement"), which was originally filed by us with the Securities and Exchange Commission (the "Commission") on October 1, 2007 and declared effective by the Commission on October 18, 2007.

The contents of the Prior Registration Statement, including the related preliminary prospectus dated October 17, 2007, and all exhibits to the Prior Registration Statement, are hereby incorporated by reference into this registration statement.

The required opinions and consents are listed on the Exhibit Index attached hereto and filed herewith.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 16. *Exhibits and Financial Statement Schedules*

a. *Exhibits:*

- 5.1* — Opinion of Vinson & Elkins LLP relating to the legality of the securities being registered.
- 8.1* — Opinion of Vinson & Elkins LLP relating to tax matters.
- 23.1* — Consent of PricewaterhouseCoopers LLP
- 23.2* — Consent of Ernst & Young LLP
- 23.3 — Consent of Vinson & Elkins LLP (contained in Exhibit 5.1)
- 24.1 — Power of Attorney (included on the signature page to the Registration Statement on Form S-1 (File No. 333-146436) filed with the Commission on October 1, 2007 and incorporated by reference herein)

* Filed herewith

b. *Financial Statement Schedules*

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Houston, in the State of Texas on October 18, 2007.

TARGA RESOURCES PARTNERS LP

By: TARGA RESOURCES GP LLC,
Its general partner

By: /s/ Jeffrey J. McParland
Name: Jeffrey J. McParland
Title: Executive Vice President and
Chief Financial Officer
(Principal Financial Officer)

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.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
* _____ Rene R. Joyce	Chief Executive Officer and Director (Principal Executive Officer)	October 18, 2007
/s/ Jeffrey J. McParland _____ Jeffrey J. McParland	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	October 18, 2007
* _____ John Robert Sparger	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	October 18, 2007
* _____ James W. Whalen	President — Finance and Administration and Director	October 18, 2007
* _____ Peter R. Kagan	Director	October 18, 2007
* _____ Chansoo Joung	Director	October 18, 2007
* _____ Barry R. Pearl	Director	October 18, 2007
* _____ Robert B. Evans	Director	October 18, 2007

Signature

Title

Date

*

William D. Sullivan

Director

October 18, 2007

*By:

/s/ Jeffrey J. McParland
Jeffrey J. McParland
Attorney-in-Fact

EXHIBIT INDEX

- 5.1* — Opinion of Vinson & Elkins LLP relating to the legality of the securities being registered.
- 8.1* — Opinion of Vinson & Elkins LLP relating to tax matters.
- 23.1* — Consent of PricewaterhouseCoopers LLP
- 23.2* — Consent of Ernst & Young LLP
- 23.3 — Consent of Vinson & Elkins LLP (contained in Exhibit 5.1)
- 24.1 — Power of Attorney (included on the signature page to the Registration Statement on Form S-1 (File No. 333-146436) filed with the Commission on October 1, 2007 and incorporated by reference herein)

* Filed herewith

October 18, 2007

Targa Resources Partners LP
1000 Louisiana, Suite 4300
Houston, Texas 77002

Ladies and Gentlemen:

We have acted as counsel to Targa Resources Partners LP, a Delaware limited partnership (the "Partnership"), in connection with the registration under the Securities Act of 1933, as amended (the "Securities Act"), of the offering and sale of up to an aggregate of 14,375,000 common units representing limited partner interests in the Partnership (the "Common Units") under the Registration Statement on Form S-1 (File No. 333-146436) (the "Prior Registration Statement"), which was declared effective by the Securities and Exchange Commission (the "Commission") on October 18, 2007, and of an additional 1,150,000 Common Units (the "Additional Common Units") having an aggregate public offering price of up to \$30,900,500 covered by the Registration Statement on Form S-1, which is to be filed pursuant to Rule 462(b) under the Securities Act (the "462(b) Registration Statement," together with the Prior Registration Statement, the "Registration Statements").

As the basis for the opinion hereinafter expressed, we examined such statutes, including the Delaware Revised Uniform Limited Partnership Act (the "Delaware Act"), partnership records and documents, certificates of partnership and public officials, and other instruments and documents as we deemed necessary or advisable for the purposes of this opinion. In such examination, we have assumed the authenticity of all documents submitted to us as originals and the conformity with the original documents of all documents submitted to us as copies.

Based on the foregoing and on such legal considerations as we deem relevant, we are of the opinion that:

1. The Partnership has been duly formed and is validly existing as a limited partnership under the Delaware Act.

2. The Additional Common Units, when issued and delivered on behalf of the Partnership against payment therefor as described in the 462(b) Registration Statement, will be duly authorized, validly issued, fully paid and non-assessable.

The foregoing opinion is limited to the laws of the United States of America, the Constitution of the State of Delaware and the Delaware Act, as interpreted by federal courts and the courts of the State of Delaware.

We hereby consent to the use of this opinion in the 462(b) Registration Statement constituting a part of the Registration Statements. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act and the rules and regulations thereunder.

Very truly yours,

/s/ VINSON & ELKINS L.L.P.

Vinson & Elkins LLP Attorneys at Law
Austin Beijing Dallas Dubai Hong Kong Houston
London Moscow New York Shanghai Tokyo Washington

First City Tower, 1001 Fannin Street, Suite 2500
Houston, TX 77002-6760
Tel 713.758.2222 **Fax** 713.758.2346 **www.velaw.com**

October 18, 2007

Targa Resource Partners LP
1000 Louisiana, Suite 4300
Houston, Texas 77002

Ladies and Gentlemen:

We have acted as counsel to Targa Resources Partners LP, a Delaware limited partnership (the "Partnership"), in connection with the registration under the Securities Act of 1933, as amended (the "Securities Act"), of the offering and sale of up to an aggregate of 14,375,000 common units representing limited partner interests in the Partnership (the "Common Units") under the Registration Statement on Form S-1 (File No. 333-146436) (the "Prior Registration Statement"), which was declared effective by the Securities and Exchange Commission (the "Commission") on October 18, 2007, and of an additional 1,150,000 Common Units (the "Additional Common Units") having an aggregate public offering price of up to \$30,900,500 covered by the Registration Statement on Form S-1, which is to be filed pursuant to Rule 462(b) under the Securities Act (the "462(b) Registration Statement," together with the Prior Registration Statement, the "Registration Statements"). In connection therewith, we prepared the discussion (the "Discussion") set forth under the caption "Material Tax Consequences" in the Registration Statement.

All statements of legal conclusions contained in the Discussion, unless otherwise noted, are our opinion with respect to the matters set forth therein as of the effective date of the Registration Statement. In addition, we are of the opinion that the Discussion with respect to those matters as to which no legal conclusions are provided is an accurate discussion of such federal income tax matters (except for the representations and statements of fact by the Partnership and its general partner, included in the Discussion, as to which we express no opinion).

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the use of our name in the Registration Statement. This consent does not constitute an admission that we are "experts" within the meaning of such term as used in the Securities Act or the rules and regulations of the Securities and Exchange Commission issued thereunder.

Very truly yours,

/s/ VINSON & ELKINS L.L.P.

Vinson & Elkins L.L.P.

Vinson & Elkins LLP Attorneys at Law
Austin Beijing Dallas Dubai Hong Kong Houston
London Moscow New York Shanghai Tokyo Washington

First City Tower, 1001 Fannin Street, Suite 2500
Houston, TX 77002-6760
Tel 713.758.2222 Fax 713.758.2346 www.velaw.com

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-1 of Targa Resources Partners LP of our report dated March 30, 2007 relating to the financial statements of Targa North Texas LP, our report dated March 30, 2007 relating to the financial statement of Targa Resources GP LLC, our report dated November 13, 2006 relating to the financial statements of the North Texas System, and our report dated September 27, 2007 relating to the financial statements of SAOU and LOU Systems of Targa Resources, Inc., which appear in Amendment No. 2 to the Registration Statement on Form S-1 (File No. 333-146436) of Targa Resources Partners LP. We also consent to the references to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

Houston, Texas
October 18, 2007

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Registration Statement on Form S-1 and related Prospectus of Targa Resources Partners LP for the registration of 1,150,000 common units representing limited partner interests, of our report dated September 28, 2007 relating to the financial statements of the SAOU and LOU Systems of Targa Resources, Inc. and our report dated July 29, 2005 relating to the financial statements of the Midstream Operations sold to Targa Resources, Inc., which appear in Amendment No. 2 to the Registration Statement on Form S-1 (File No. 333-146436) of Targa Resources Partners LP. We also consent to the reference to our firm under the caption "Experts" in such Registration Statement.

/s/ Ernst & Young LLP

Houston, Texas
October 18, 2007