

175 3490

FORM D

Notice of Exempt Offering of Securities

U.S. Securities and Exchange Commission

Washington, DC 20549

(See instructions beginning on page 5)

OMB APPROVAL
OMB Number: 3235-0076
Expires: January 31, 2009
Estimated average burden hours per response: 4.00

Intentional misstatements or omissions of fact constitute federal criminal violations. See 18 U.S.C. 1001.

Item 1. Issuer's Identity

Name of Issuer
EnCap Energy Infrastructure Fund, L.P.

Jurisdiction of Incorporation/Organization
State of Texas

Year of Incorporation/Organization (Select one)

Over Five Years Ago Within Last Five Years (specify year) 2008 Yet to Be Formed

Previous Name(s) [X] None

- Entity Type (Select one)
Corporation
[X] Limited Partnership
Limited Liability Company
General Partnership
Business Trust
Other (Specify)

(If more than one issuer is filing this notice, check this box [] and identify additional issuer(s) by attaching Items 1 and 2 Continuation Page(s).)

Item 2. Principal Place of Business and Contact Information

Street Address 1
300 East Sonterra Blvd., Suite 1200
City
San Antonio
State/Province/Country
Texas

Street Address 2
[]
ZIP/Postal Code
78258
Phone No.
210.497.4444

PROCESSED
JAN 13 2009
THOMSON REUTERS

Item 3. Related Persons

Last Name
EnCap Energy Infrastructure Fund GP, L.P.
First Name
Middle Name

Street Address 1
300 East Sonterra Blvd., Suite 1200
City
San Antonio
State/Province/Country
Texas
ZIP/Postal Code
78258

Relationship(s): [] Executive Officer [] Director [] Promoter

Clarification of Response (if Necessary) General Partner

(Identify additional related persons by checking this box [X] and attaching Item 3 Continuation Page(s).)

Item 4. Industry Group (Select one)

- Agriculture
Banking and Financial Services
Commercial Banking
Insurance
Investing
Investment Banking
Pooled Investment Fund

If selecting this industry group, also select one fund type below and answer the question below:

- Hedge Fund
Private Equity Fund
Venture Capital Fund
Other Investment Fund

Is the Issuer registered as an investment company under the Investment Company Act of 1940? [] Yes [] No

Other Banking & Financial Services

- Business Services
Energy
Electric Utilities
Energy Conservation
Coal Mining
Environmental Services
Oil & Gas
Other Energy

- Health Care
Biotechnology
Health Insurance
Hospitals & Physicians
Pharmaceuticals
Other Health Care

- Manufacturing
Real Estate
Commercial

- Construction
REITS & Finance
Residential
Other Real Estate

- Retailing
Restaurants
Technology

- Computers
Telecommunications
Other Technology

- Travel
Airlines & Airports



09000246

Item 5. Issuer Size (Select one)

Revenue Range (for issuer not specifying "hedge" or "other investment" fund in Item 4 above)

- No Revenues
- \$1 - \$1,000,000
- \$1,000,001 - \$5,000,000
- \$5,000,001 - \$25,000,000
- \$25,000,001 - \$100,000,000
- Over \$100,000,000
- Decline to Disclose
- Not Applicable

OR

Aggregate Net Asset Value Range (for issuer specifying "hedge" or "other investment" fund in Item 4 above)

- No Aggregate Net Asset Value
- \$1 - \$5,000,000
- \$5,000,001 - \$25,000,000
- \$25,000,001 - \$50,000,000
- \$50,000,001 - \$100,000,000
- Over \$100,000,000
- Decline to Disclose
- Not Applicable

Item 6. Federal Exemptions and Exclusions Claimed (Select all that apply)

- | | | |
|--|--|---|
| <input type="checkbox"/> Rule 504(b)(1) (not (i), (ii) or (iii)) | <input type="checkbox"/> Section 3(c)(1) | <input type="checkbox"/> Section 3(c)(9) |
| <input type="checkbox"/> Rule 504(b)(1)(i) | <input type="checkbox"/> Section 3(c)(2) | <input type="checkbox"/> Section 3(c)(10) |
| <input type="checkbox"/> Rule 504(b)(1)(ii) | <input type="checkbox"/> Section 3(c)(3) | <input type="checkbox"/> Section 3(c)(11) |
| <input type="checkbox"/> Rule 504(b)(1)(iii) | <input type="checkbox"/> Section 3(c)(4) | <input type="checkbox"/> Section 3(c)(12) |
| <input type="checkbox"/> Rule 505 | <input type="checkbox"/> Section 3(c)(5) | <input type="checkbox"/> Section 3(c)(13) |
| <input checked="" type="checkbox"/> Rule 506 | <input type="checkbox"/> Section 3(c)(6) | <input type="checkbox"/> Section 3(c)(14) |
| <input type="checkbox"/> Securities Act Section 4(6) | <input type="checkbox"/> Section 3(c)(7) | |

Item 7. Type of Filing

- New Notice **OR** Amendment

Date of First Sale in this Offering: **OR** First Sale Yet to Occur

Item 8. Duration of Offering

Does the issuer intend this offering to last more than one year? Yes No

Item 9. Type(s) of Securities Offered (Select all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Equity | <input type="checkbox"/> Pooled Investment Fund Interests |
| <input type="checkbox"/> Debt | <input type="checkbox"/> Tenant-in-Common Securities |
| <input type="checkbox"/> Option, Warrant or Other Right to Acquire Another Security | <input type="checkbox"/> Mineral Property Securities |
| <input type="checkbox"/> Security to be Acquired Upon Exercise of Option, Warrant or Other Right to Acquire Security | <input type="checkbox"/> Other (Describe) |
-

Item 10. Business Combination Transaction

Is this offering being made in connection with a business combination transaction, such as a merger, acquisition or exchange offer? Yes No

Clarification of Response (if Necessary)

Item 11. Minimum Investment

Minimum investment accepted from any outside investor \$ No minimum

Item 12. Sales Compensation

Recipient: N/A, Recipient CRD Number: [], (Associated) Broker or Dealer: [], Street Address 1: [], Street Address 2: [], City: [], State/Province/Country: [], ZIP/Postal Code: [], States of Solicitation: [] All States, [] AL, [] AK, [] AZ, [] AR, [] CA, [] CO, [] CT, [] DE, [] DC, [] FL, [] GA, [] HI, [] ID, [] IL, [] IN, [] IA, [] KS, [] KY, [] LA, [] ME, [] MD, [] MA, [] MI, [] MN, [] MS, [] MO, [] MT, [] NE, [] NV, [] NH, [] NJ, [] NM, [] NY, [] NC, [] ND, [] OH, [] OK, [] OR, [] PA, [] RI, [] SC, [] SD, [] TN, [] TX, [] UT, [] VT, [] VA, [] WA, [] WV, [] WI, [] WY, [] PR

(Identify additional person(s) being paid compensation by checking this box [] and attaching Item 12 Continuation Page(s).)

Item 13. Offering and Sales Amounts

(a) Total Offering Amount \$ [] OR [X] Indefinite
(b) Total Amount Sold \$ 223,850,000.00
(c) Total Remaining to be Sold (Subtract (a) from (b)) \$ [] OR [X] Indefinite

Clarification of Response (if Necessary)

[]

Item 14. Investors

Check this box [] if securities in the offering have been or may be sold to persons who do not qualify as accredited investors, and enter the number of such non-accredited investors who already have invested in the offering: []

Enter the total number of investors who already have invested in the offering: 30

Item 15. Sales Commissions and Finders' Fees Expenses

Provide separately the amounts of sales commissions and finders' fees expenses, if any. If an amount is not known, provide an estimate and check the box next to the amount.

Sales Commissions \$ -0- [] Estimate

Finders' Fees \$ -0- [] Estimate

Clarification of Response (if Necessary)

[]

Item 16. Use of Proceeds

Provide the amount of the gross proceeds of the offering that has been or is proposed to be used for payments to any of the persons required to be named as executive officers, directors or promoters in response to Item 3 above. If the amount is unknown, provide an estimate and check the box next to the amount.

\$ -0-

Estimate

Clarification of Response (if Necessary)

[Empty box for clarification of response]

Signature and Submission

Please verify the information you have entered and review the Terms of Submission below before signing and submitting this notice.

Terms of Submission. In Submitting this notice, each identified issuer is:

Notifying the SEC and/or each State in which this notice is filed of the offering of securities described and undertaking to furnish them, upon written request, in accordance with applicable law, the information furnished to offerees.*

Irrevocably appointing each of the Secretary of the SEC and the Securities Administrator or other legally designated officer of the State in which the issuer maintains its principal place of business and any State in which this notice is filed, as its agents for service of process, and agreeing that these persons may accept service on its behalf, of any notice, process or pleading, and further agreeing that such service may be made by registered or certified mail, in any Federal or state action, administrative proceeding, or arbitration brought against the issuer in any place subject to the jurisdiction of the United States, if the action, proceeding or arbitration (a) arises out of any activity in connection with the offering of securities that is the subject of this notice, and (b) is founded, directly or indirectly, upon the provisions of: (i) the Securities Act of 1933, the Securities Exchange Act of 1934, the Trust Indenture Act of 1939, the Investment Company Act of 1940, or the Investment Advisers Act of 1940, or any rule or regulation under any of these statutes; or (ii) the laws of the State in which the issuer maintains its principal place of business or any State in which this notice is filed.

Certifying that, if the issuer is claiming a Rule 505 exemption, the issuer is not disqualified from relying on Rule 505 for one of the reasons stated in Rule 505(b)(2)(iii).

* This undertaking does not affect any limits Section 102(a) of the National Securities Markets Improvement Act of 1996 ("NSMIA") [Pub. L. No. 104-290, 110 Stat. 3416 (Oct. 11, 1996)] imposes on the ability of States to require information. As a result, if the securities that are the subject of this Form D are "covered securities" for purposes of NSMIA, whether in all instances or due to the nature of the offering that is the subject of this Form D, States cannot routinely require offering materials under this undertaking or otherwise and can require offering materials only to the extent NSMIA permits them to do so under NSMIA's preservation of their anti-fraud authority.

Each identified issuer has read this notice, knows the contents to be true, and has duly caused this notice to be signed on its behalf by the undersigned duly authorized person. (Check this box and attach Signature Continuation Pages for signatures of issuers identified in Item 1 above but not represented by signer below.)

Issuer(s)

EnCap Energy Infrastructure Fund, L.P.

Name of Signer

By: EnCap Energy Infrastructure Fund GP, L.P., its general partner

Signature

By: Gary R. Petersen, Authorized Signatory

Title

By: EnCap Energy Infrastructure Fund GP, LLC, its general partner

Number of continuation pages attached:

2

Date

December 30, 2008

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.

Item 3 Continuation Page

Item 3. Related Persons (Continued)

Last Name	First Name	Middle Name
Miller	David	B.
Street Address 1	Street Address 2	
3811 Turtle Creek Blvd., Suite 1080		
City	State/Province/Country	ZIP/Postal Code
Dallas	Texas	75219
Relationship(s):	<input checked="" type="checkbox"/> Executive Officer <input type="checkbox"/> Director <input type="checkbox"/> Promoter	
Clarification of Response (if Necessary)		

Last Name	First Name	Middle Name
Petersen	Gary	R.
Street Address 1	Street Address 2	
1100 Louisiana St., Suite 3150		
City	State/Province/Country	ZIP/Postal Code
Houston	Texas	77002
Relationship(s):	<input checked="" type="checkbox"/> Executive Officer <input type="checkbox"/> Director <input type="checkbox"/> Promoter	
Clarification of Response (if Necessary)		

Last Name	First Name	Middle Name
Phillips	D.	Martin
Street Address 1	Street Address 2	
1100 Louisiana St., Suite 3150		
City	State/Province/Country	ZIP/Postal Code
Houston	Texas	77002
Relationship(s):	<input checked="" type="checkbox"/> Executive Officer <input type="checkbox"/> Director <input type="checkbox"/> Promoter	
Clarification of Response (if Necessary)		

Last Name	First Name	Middle Name
Zorich	Robert	L.
Street Address 1	Street Address 2	
1100 Louisiana St., Suite 3150		
City	State/Province/Country	ZIP/Postal Code
Houston	Texas	77002
Relationship(s):	<input checked="" type="checkbox"/> Executive Officer <input type="checkbox"/> Director <input type="checkbox"/> Promoter	
Clarification of Response (if Necessary)		

(Copy and use additional copies of this page as necessary.)

Item 3 Continuation Page

Item 3. Related Persons (Continued)

Last Name: Jaggi, First Name: Dennis, Middle Name: F.
Street Address 1: 2000 SE 15th Street, Building 150-D, Street Address 2:
City: Edmond, State/Province/Country: Oklahoma, ZIP/Postal Code: 73013
Relationship(s): Executive Officer, Director, Promoter
Clarification of Response (if Necessary):

Last Name: Lemmons, Jr., First Name: William, Middle Name: R.
Street Address 1: 300 East Sonterra Blvd., Suite 1200, Street Address 2:
City: San Antonio, State/Province/Country: Texas, ZIP/Postal Code: 78258
Relationship(s): Executive Officer, Director, Promoter
Clarification of Response (if Necessary):

Last Name: Waldrip, First Name: William, Middle Name: D.
Street Address 1: 300 East Sonterra Blvd., Suite 1200, Street Address 2:
City: San Antonio, State/Province/Country: Texas, ZIP/Postal Code: 78258
Relationship(s): Executive Officer, Director, Promoter
Clarification of Response (if Necessary):

Last Name: , First Name: , Middle Name:
Street Address 1: , Street Address 2:
City: , State/Province/Country: , ZIP/Postal Code:
Relationship(s): Executive Officer, Director, Promoter
Clarification of Response (if Necessary):

(Copy and use additional copies of this page as necessary.)

END