Enterprise GP Holdings L.P.

Form 3

August 22, 2005

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

OMB APPROVAL

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INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF **SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *

Nix Rudy A

(Last)

(First)

Statement

(Month/Day/Year)

08/22/2005

2. Date of Event Requiring 3. Issuer Name and Ticker or Trading Symbol Enterprise GP Holdings L.P. [EPE]

2727 NORTH LOOP WEST

(Street)

4. Relationship of Reporting Person(s) to Issuer

5. If Amendment, Date Original

Filed(Month/Day/Year)

(Check all applicable)

Director Officer

10% Owner __X__ Other (give title below) (specify below)

6. Individual or Joint/Group

Filing(Check Applicable Line) _X_ Form filed by One Reporting

Person

Form filed by More than One Officer of Subdidiary Reporting Person

HOUSTON, TXÂ 77008

(City) (State)

1. Title of Security (Instr. 4)

(Zip)

(Middle)

2. Amount of Securities Beneficially Owned

(Instr. 4)

Ownership Form:

Direct (D) or Indirect (I) (Instr. 5)

Table I - Non-Derivative Securities Beneficially Owned

4. Nature of Indirect Beneficial Ownership

(Instr. 5)

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

SEC 1473 (7-02)

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Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)

2. Date Exercisable and **Expiration Date** (Month/Day/Year)

3. Title and Amount of Securities Underlying **Derivative Security** (Instr. 4)

4. Conversion or Exercise Price of Derivative

Security

5. Ownership Form of Derivative Security:

6. Nature of Indirect Beneficial Ownership (Instr. 5)

Expiration Date Exercisable Date

Title

Amount or Number of Shares

Direct (D) or Indirect (I) (Instr. 5)

Reporting Owners

Reporting Owner Name / Address Relationships

Director 10% Owner Officer Other

Nix Rudy A

2727 NORTH LOOP WEST Officer of Subdidiary HOUSTON, TXÂ 77008

Signatures

John E. Smith, Attorney in Fact, on behalf of Rudy
A. Nix

08/22/2005

**Signature of Reporting Person Date

Explanation of Responses:

No securities are beneficially owned

- * If the form is filed by more than one reporting person, see Instruction 5(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *See* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.

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