

SPIRE CORP
 Form 4
 September 20, 2005

FORM 4 UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN 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 *
LIPINSKI DAVID R
 (Last) (First) (Middle)

2. Issuer Name and Ticker or Trading Symbol
SPIRE CORP [SPIR]

5. Relationship of Reporting Person(s) to Issuer
 (Check all applicable)

C/O SPIRE CORPORATION, ONE PATRIOTS PARK
 (Street)

3. Date of Earliest Transaction (Month/Day/Year)
09/19/2005

Director 10% Owner
 Officer (give title below) Other (specify below)

BEDFORD, MA 01730
 (City) (State) (Zip)

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
				(A) or (D)	Price		
				Code	V	Amount	
Common Stock, \$0.01 par value	09/19/2005		M	10,000	A	\$ 6.05	11,200 ⁽¹⁾ D
Common Stock, \$0.01 par value	09/19/2005		S	10,000	D	\$ 10.1412 ⁽²⁾	1,200 ⁽¹⁾ D

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

Persons who respond to the collection of information contained in this form are not required to respond unless the form

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

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Underlying Security (Instr. 3 and 4)
Non-Incentive Stock Option (right to buy)	\$ 6.05	09/19/2005		M	10,000	06/06/2002 ⁽³⁾ 06/06/2011	Common Stock

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
LIPINSKI DAVID R C/O SPIRE CORPORATION ONE PATRIOTS PARK BEDFORD, MA 01730		X		

Signatures

David R.
Lipinski

09/20/2005

Signature of Reporting Person

Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 4(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).
- (1) The amount of securities beneficially owned includes 1,200, directly held by the reporting person, which have been previously reported.
- (2) Price is based on weighted average of sale prices.
- (3) The option is exercisable in annual increments of 25% of the option shares, with the first quarter increment becoming exercisable on the date shown in this column. This option is now fully vested.

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.