

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

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

| OMB APPROVAL | | | | | |
|-------------------|----------------------|--|--|--|--|
| OMB | 3235- | | | | |
| Number: | 0287 | | | | |
| Expires: | November 30, 2011 | | | | |
| Estimated average | | | | | |
| burden hours per | | | | | |
| response 0.5 | | | | | |

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) | | | | | | | | | | |
|--|--|--|--|-----------|------|--|-----------------------------------|--|---|--|---|
| Person - | and Address of Re | porting | 2. Issuer Name and Ticker or Trading Symbol InfuSystem Holdings, Inc [INHI.OB] | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Officer (give title below)Other (specify below) | | | |
| HOLDI | ^(First) FUSYSTEM NGS, INC., 317 ARCH PARK D | | | /Day/Yea | | ransactio | on | | | below) | |
| MADIS HEIGH | (Street) 4. If Amendment, Date Original Filed(Month/Day/Year) ISON GHTS, MI 48071 | | | | | 6. Individual or Joint/Group Filing(Check Applicable Line) _X_ Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | | |
| (City) | (State) | (Zip) | Table | I - Non-D | eriv | ative Se | curi | ties Ao Owr | cquired, Dispos ned | sed of, or B | eneficially |
| 1.Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deem Execution if any (Month/Da | Date, | Code | | 4. Secur Acquired Dispose (Instr. 3) Amount | d (A) d of 4 a (A) or | or (D) nd 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) |

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 displays a currently valid OMB control number.

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned

| | (<i>e.g.</i> , puts, cans, warrants, options, convertible securities) | | | | | | | | | | | | | | | | |
|---|--|------------|---|------|-----|---|---------|--|--------------------|-----------------|---|------------|------------|------------|--|--|-----|
| 1. Title of Derivative Security (Instr. 3) | Conversion | | 3A. Deemed Execution Date, if any (Month/Day/Year) | Code | ion | 5. Number Derivative Securities Acquired (<i>i</i> or Dispose of (D) (Instr. 3, 4, and 5) | A) d | 6. Date Exe and Expirati (Month/Day/ | on Date | Underlying | Inderlying Securities nstr. 3 and 4) | | , , | | Derivative Securities Beneficially Owned Following Reported Transaction(s) | Form of Derivative Security: Direct (D) or Indirect (I) | . , |
| | | | | Code | v | (A) | (D) | Exercisable | Expiration Date | Title | Amount or Number of Shares | | (Instr. 4) | (Instr. 4) | | | |
| Restricted Stock Award ⁽¹⁾ | (1) | 04/08/2010 | | A | | 100,000 | | (1) | (1) | Common Stock | 100,000 | <u>(1)</u> | 100,000 | D | | | |

Reporting Owners

| Benerting Owner Neme / Address | Relationships | | | | | | | |
|--|---------------|-----------|---------|-------|--|--|--|--|
| Reporting Owner Name / Address | Director | 10% Owner | Officer | Other | | | | |
| Yetter Wayne P. C/O INFUSYSTEM HOLDINGS, INC. 31700 RESEARCH PARK DRIVE MADISON HEIGHTS, MI 48071 | x | | | | | | | |

Signatures

| /s/ Wayne Yetter | 04/12/2010 |
|--------------------------------|------------|
| -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 restricted stock award is granted under the InfuSystem Holdings, Inc. 2007 Stock Incentive Plan. The restricted stock award vests in three equal annual installments beginning April 8, 2011.

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.