

# SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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AMENDMENT NO. 1

TO

SCHEDULE TO

TENDER OFFER STATEMENT UNDER SECTION 14(d)(1) OR 13(e)(1)  
OF THE SECURITIES EXCHANGE ACT OF 1934

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## INFUSYSTEM HOLDINGS, INC.

(Name of Subject Company (Issuer))

## INFUSYSTEM HOLDINGS, INC.

(Name of Filing Person (Identifying Status as Offeror, Issuer or Other Person))

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Warrants to Purchase Common Stock  
Having an Exercise Price of \$5.00 per Share  
(Title of Classes of Securities)

45685K110

(CUSIP Number of Class of Securities)

Sean McDevitt

Chief Executive Officer

31700 Research Park Drive

Madison Heights, Michigan 48071

(248) 291-1210

(Name, Address and Telephone Number of Person Authorized  
to Receive Notices and Communications on Behalf of Filing Person)

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*Copy to:*

Morgan, Lewis & Bockius LLP

101 Park Avenue

New York, New York 10178

(212) 309-6843

Attn: Howard Kenny

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### CALCULATION OF FILING FEE

Transaction Valuation\*

**\$1,966,060.26**

Amount of Filing Fee\*\*

**\$140.18**

\* This valuation assumes the exchange of 35,108,219 warrants to purchase common stock of InfuSystem Holdings, Inc. ("the Company"), for common shares of the Company's common stock, par value \$0.0001 per share. Estimated for purposes of calculating the amount of the filing fee only, this amount is based on the average of the bid and ask price of the warrants of \$0.056 as of February 8, 2010 as quoted on the OTC Bulletin Board under the symbol "INHIW.OB".

\*\* The amount of the filing fee was calculated in accordance with the Securities Exchange Act of 1934, as amended, and equals \$71.30 for each \$1,000,000 of the value of the transaction.

X Check the box if any part of the fee is offset as provided by Rule 0-11(a)(2) and identify the filing with which the offsetting fee was previously paid. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

Amount Previously Paid: \$140.18  
Form or Registration No.: Schedule TO

Filing Party: InfuSystem Holdings, Inc.  
Date Filed: February 16, 2010

.. Check the box if the filing relates solely to preliminary communications made before the commencement of a tender offer.

Check the appropriate boxes below to designate any transactions to which the statement relates:

- third party tender offer subject to Rule 14d 1.
- issuer tender offer subject to Rule 13e 4.
- going private transaction subject to Rule 13e 3.
- amendment to Schedule 13D under Rule 13d 2.

Check the following box if the filing is a final amendment reporting the results of the tender offer:

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## INTRODUCTORY STATEMENT

This Amendment No. 1 (this “Amendment”) amends and supplements the Tender Offer Statement on Schedule TO, as amended (the “Schedule TO”), originally filed on February 16, 2010 by InfuSystem Holdings, Inc., a Delaware corporation (the “Company”). The Schedule TO relates to the offer by the Company to exchange (the “Exchange Offer”) any and all warrants to purchase common stock exercisable at \$5.00 per share (the “Warrants”) for shares of the Company’s common stock, par value \$0.0001 per share (“Common Stock”), upon the terms and subject to the conditions set forth in the Company’s offer to exchange, dated February 16, 2010 (the “Exchange Offer Statement”), and in the related Exchange Offer materials which are filed as Exhibits (a)(1)(A) to (a)(1)(C) to the Schedule TO filed on February 16, 2010 (which the Exchange Offer and related Exchange Offer materials, as amended or supplemented from time to time, collectively constitute the “Offer Materials”).

### **Item 1 through 11**

As permitted by General Instruction F to the Schedule TO, all of the information in the Exchange Offer materials is hereby incorporated by reference in answer to Items 1 through 11 of the Schedule TO, subject to any statements made in the preamble to this Amendment No. 1 above and subject to the following additional statements and disclosures:

### **Item 10**

Item 10(a) of the Schedule TO is hereby amended and supplemented to read as follows:

(1) The consolidated balance sheets of the Company as of December 31, 2009 and 2008 and the related consolidated statements of income, stockholders’ equity, and cash flows for the years ended December 31, 2009 and 2008 are incorporated by reference in the Exchange Offer under the caption entitled “ Available Information/Incorporation by Reference” which is incorporated herein by reference.

(2) Not Applicable

(3) Not Applicable

(4) Not Applicable

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**SIGNATURE**

After due inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

**INFUSYSTEM HOLDINGS, INC.**

Date: March 3, 2010

By: \_\_\_\_\_ /s/ SEAN WHELAN  
Sean Whelan  
Chief Financial Officer