

Pfenex Inc.  
Form 3  
July 17, 2014

**FORM 3 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 *		2. Date of Event Requiring Statement	3. Issuer Name and Ticker or Trading Symbol	
Â DOW CHEMICAL CO /DE/		(Month/Day/Year)	Pfenex Inc. [PFNX]	
(Last)	(First)	(Middle)	07/17/2014	
2030 DOW CENTER			4. Relationship of Reporting Person(s) to Issuer	5. If Amendment, Date Original Filed(Month/Day/Year)
(Street)			(Check all applicable)	
MIDLAND,Â MIÂ 48674			<input type="checkbox"/> Director	<input checked="" type="checkbox"/> 10% Owner
(City)	(State)	(Zip)	<input type="checkbox"/> Officer	<input type="checkbox"/> Other
			(give title below)	(specify below)
				6. Individual or Joint/Group Filing(Check Applicable Line)
				<input checked="" type="checkbox"/> Form filed by One Reporting Person
				<input type="checkbox"/> Form filed by More than One Reporting Person

**Table I - Non-Derivative Securities Beneficially Owned**

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
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Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

SEC 1473 (7-02)

**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 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: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date			
		Title	Amount or Number of Shares		

Series A-1 Participating Preferred Stock	Â (1)	Â (1)	Common Stock	4,032,716	\$ 0 (1)	D	Â
Series A-1 Participating Preferred Stock	Â (1)	Â (1)	Common Stock	945,945	\$ 0 (1)	I	See footnote (2)

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
DOW CHEMICAL CO /DE/ 2030 DOW CENTER MIDLAND,Â MIÂ 48674	Â	Â X	Â	Â

## Signatures

/s/ William H. Weideman, Chief Financial Officer  
07/17/2014

\_\_Signature of Reporting Person

Date

## Explanation of Responses:

- \* 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).
- (1) Each share of Series A-1 Participating Preferred Stock will automatically convert into 1 share of the Issuer's Common Stock upon the closing of the Issuer's initial public offering without payment of further consideration. The shares have no expiration date.
- (2) Shares held by Dow Global Technologies, LLC, a wholly-owned subsidiary of the reporting person.

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.