

[] 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

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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person * MacFarlane Katie						2. Issuer Name and Ticker or Trading Symbol RespireRx Pharmaceuticals Inc. [RSPI]										5. Relationship of Reporting Person(s) to Issuer (Check all applicable)					
																(Check an applicable)					
(Last) (First) (Middle)						3. Date of Earliest Transaction (MM/DD/YYYY)										X _ Director 10% Owner Officer (give title below) Other (specify below)					
C/O RESPIRERX						3/31/2016															
PHARMAC VALLEY R	CEUTICA		2., 126																		
		reet)			4. I	f A	mendme	nt, D	ate C	Origin	al Fi	led (MM/D	D/YYYY	7) 6.	. Individual	or Joint/G	roup Filing	(Check Appl	icable Line)	
GLEN ROCK, NJ 07452															_ 2	X Form filed by One Reporting Person Form filed by More than One Reporting Person					
(1	City) (S	tate) (Z	ip)																		
			Table 1	I - Non-	Der	ivat	tive Secu	ıritie	s Ac	quire	ed, D	ispo	sed o	of, or Bo	enefi	icially Own	ed				
1. Title of Security (Instr. 3) 2. Trans. D					Date 2A. Deemed Execution Date, if any		3. Trans. Co (Instr. 8)		ode	4. Securities A or Disposed of (Instr. 3, 4 and		d of (D	D) Fol		Amount of Securities Beneficially Owned sollowing Reported Transaction(s) str. 3 and 4)			6. Ownership Form: Direct (D)	Beneficial		
				Co			ode	V	Amo	unt	(A) or (D)	Price						Ownership (Instr. 4)			
	Tal	ble II - Dei	ivative	Securit	ies E	3en	eficially	Own	ied (e.g. ,	puts	s, cal	lls, w	arrants	s, op	tions, conve	ertible sec	urities)			
1. Title of Derivate Security (Instr. 3)	2. Conversion or Exercise Price of Derivative		3A. Deemed Execution Date, if any (In			5. Number Derivative Acquired (A Disposed o (Instr. 3, 4 a		Securities A) or of (D)						7. Title and A Securities Un Derivative Se (Instr. 3 and 4		derlying Derivative security Security		Securities Beneficially Owned	10. Ownership Form of Derivative Security:	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
	Security			Code		V	(A)		(D)		sable		ration	Title	N	mount or lumber of hares		Following Reported Transaction(s) (Instr. 4)	Direct (D) or Indirect (I) (Instr. 4)		
Common Stock Options (to purchase shares of Common Stock)	\$0.0227	3/31/2016		A			10000000			Ü	<u>l)</u>	3/31/	/2021	Commo Stock	on	10000000	\$0	10000000	D		
Common Stock Options (to purchase shares of Common Stock)	\$0.0197									<u>(2</u>	<u>2)</u>	8/18/	/2022	Commo Stock		3000000		3000000	D		
Common Stock Options (to purchase shares of Common Stock)	\$0.025									<u>(</u>	<u>3)</u>	6/30/	/2022	Commo Stock	on	2000000		2000000	D		

Explanation of Responses:

- (These Common Stock Options vest in four equal installments: 25 percent on March 31, 2016 (the grant date), 25 percent on June 30, 2016, 25 percent on
- 1) September 30, 2016, and 25 percent on December 31, 2016.
- (These Common Stock Options vest in four equal installments: 25 percent on December 31, 2015, 25 percent on March 31, 2016, 25 percent on June 30, 2016,
- 2) and 25 percent on September 30, 2016.
 - The Common Stock Options vest in three installments: 50 percent on June 30, 2015, 25 percent on September 30, 2015, and 25 percent on December 31,
- **3)** 2015.

Reporting Owners

Reporting Owner Name / Address	Relationships						
Reporting Owner Name / Address	Director	10% Owner	Officer	Other			
MacFarlane Katie C/O RESPIRERX PHARMACEUTICALS INC. 126 VALLEY ROAD, SUITE C GLEN ROCK, NJ 07452	X						

Signatures

/s/ Kathryn MacFarlane 4/4/2016 **Signature of Reporting Person Date

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

- * 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).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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.