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 or Section 30(h) of the Investment Company Act of 1940

1. Name and A Summers	rting Person*	2. Date of Requiring (Month/Da	Statement sy/Year)	3. Issuer Name and Ticker or Trading Symbol LanzaTech Global, Inc. [LNZA]						
(Last) (First) (Middle) 8045 LAMON AVENUE SUITE 400			_ 07/02/20	23	4. Relationship of Reporting Issuer (Check all applicable) Director X Officer (give title below)	10% Owner Other (specify below)		5. If Amendment, Date of Original Filed (Month/Day/Year)		
(Street) SKOKIE (City)	IL (State)	60077 (Zip)			Chief Science	Officer		6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person		
Table I - Non-Derivative Securities Beneficially Owned										
				2. Amount of Securities Beneficially Owned (Instr. 4)	3. Owner Form: Di (D) or Ind (I) (Instr.	rect Ow	lature of Indire nership (Instr.			
Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)										
			2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion	Form:	6. Nature of Indirect Beneficial Ownership (Instr.	
		Date Exercisable	Expiration Date	Title	Amount or Number of Shares	Price of Derivative Security	Direct (D) or Indirect (I) (Instr. 5)	5)		
Stock Option	15		(1)	01/27/2033	Common Stock	43,746	9.97	D		
Stock Option	15		(2)	05/02/2033	Common Stock	114,503	3.28	D		
Restricted Stock Units		(3)	(3)	Common Stock	135,261	(3)	D			

Explanation of Responses:

- 1. 25% of the options are vested and exercisable, the remaining will vest in equal installments of 25% on each of January 27, 2024, January 27, 2025, and January 27, 2026.
- 2. Subject to the terms of the Stock Option Agreement, the shares subject to the stock option will vest and become exercisable in approximately three equal annual installments, with such first installment vesting on March 6, 2024.
- 3. Each Restricted Stock Unit (RSU) represents a contingent right to receive one share of common stock of LanzaTech Global, Inc. (the "Company"). Subject to the terms of the RSU Agreement, the RSUs will vest in approximately three equal annual installments, with such first installment vesting on March 6, 2024.

Remarks

Exhibit 24.1 - Power of Attorney

<u>/s/ Joseph Blasko, as</u> <u>Attorney-in-Fact</u>

07/12/2023

** 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 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).

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

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