

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 Address of Reporting Person * Rasmus Robert E.	2. Date of Event Requiring Statement (MM/DD/YYYY) 7/14/2023	3. Issuer Name and Ticker or Trading Symbol Advanced Emissions Solutions, Inc. [ADES]
(Last) (First) (Middle) C/O ADVANCED EMISSIONS SOLUTIONS, INC., 8051 E MAPLEWOOD AVE STE 210	4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) Chief Executive Officer /	
(Street) GREENWOOD VILLAGE, CO 80111	5. If Amendment, Date Original Filed(MM/DD/YYYY)	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
(City) (State) (Zip)		

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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Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivate Security (Instr. 4)	2. Date Exercisable and Expiration Date (MM/DD/YYYY)		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			

Explanation of Responses:

Remarks:

Exhibit 24.1 - Power of Attorney.

No securities are beneficially owned.

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Rasmus Robert E. C/O ADVANCED EMISSIONS SOLUTIONS, INC. 8051 E MAPLEWOOD AVE STE 210 GREENWOOD VILLAGE, CO 80111	X		Chief Executive Officer	

Signatures

/s/ **Robert E. Rasmus**

7/19/2023

**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.

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.

Power of Attorney

Know all by these presents, that the undersigned hereby constitutes and appoints each of Morgan Fields and Clay Smith, his or her true and lawful attorney-in-fact to:

(1) execute for and on behalf of the undersigned, in his or her capacity as an officer, director or ten percent stockholder of Advanced Emissions Solutions, Inc. (the “**Issuer**”), Forms 3, 4, and 5 in accordance with Section 16(a) of the Securities Exchange Act of 1934, as amended, and the rules thereunder;

(2) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Form 3, 4, or 5 and timely file such form with the United States Securities and Exchange Commission and any stock exchange or similar authority; and

(3) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact’s discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact’s substitute or substitutes, shall lawfully do or cause to be done by virtue of this Power of Attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Issuer assuming, any of the undersigned’s responsibilities to comply with Section 16 of the Securities Exchange Act of 1934, as amended.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4, and 5 with respect to his or her holdings of and transactions in securities issued by the Issuer, unless earlier revoked by him in a signed writing delivered to the foregoing attorneys-in-fact.

[Signature on following page.]

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney July 13, 2023.

/s/ Robert E. Rasmus
Robert E. Rasmus

SIGNATURE PAGE TO POWER OF ATTORNEY
Advanced Emissions Solutions, Inc. Section 16 Filings