
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

**POST-EFFECTIVE AMENDMENT NO. 2 TO
FORM S-8
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933**

Advanced Emissions Solutions, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

27-5472457
(I.R.S. Employer Identification No.)

**8051 E. Maplewood Ave., Suite 210
Greenwood Village, CO 80111**
(Address of principal executive offices, Zip Code)

ADA-ES, Inc. Profit Sharing Retirement Plan
(Full title of the plan)

Greg Marken
President, Chief Executive Officer and Treasurer
8051 E. Maplewood Ave., Suite 210
Greenwood Village, CO 80111
(720) 598-3500
(Name, Address and Telephone Number, Including Area Code, of Agent for Service)

Copies to:
Krista Hanvey
Gibson, Dunn & Crutcher LLP
2001 Ross Avenue, Suite 2100
Dallas, TX 75201
Telephone: (214) 698-3100
Facsimile: (214) 571-2900

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

DEREGISTRATION OF SECURITIES

Advanced Emissions Solutions, Inc., a Delaware corporation (the "Registrant") is filing this Post-Effective Amendment No. 2 to Form S-8 Registration Statement (this "Post-Effective Amendment No. 2") to amend the Registration Statement on Form S-8 (Registration No. 333-159715), which was filed by ADA-ES, Inc., a Delaware corporation ("ADA-ES"), on June 3, 2009 (the "Registration Statement"), relating to shares of its common stock that were issuable under the ADA-ES, Inc. Profit Sharing Retirement Plan (the "Plan"), as amended by that certain Post-Effective Amendment No. 1 to Form S-8 Registration Statement filed by the Registrant on July 3, 2013 ("Post-Effective Amendment No. 1", and together with the Registration Statement, the "Prior Registration Statement"), which was filed in connection with the Registrant's acquisition of ADA-ES wherein each outstanding share of common stock of ADA-ES was converted into one share of common stock of the Registrant and the Plan was assumed by the Registrant. The Registrant is no longer offering its securities under the Plan.

This Post-Effective Amendment No. 2 is being filed in order to deregister any securities that remain unsold or unissued under the Plan, and to terminate the Prior Registration Statement as to such securities. In accordance with an undertaking made by the Registrant in the Prior Registration Statement to remove from registration, by means of a post-effective amendment, any of the securities which remain unsold at the termination of the offering, the Registrant hereby removes from registration all of the securities registered under the Prior Registration Statement which are issuable pursuant to the Plan and remain unsold as of the date hereof. Although the securities under the Plan are being deregistered, this Post-Effective Amendment No. 2 shall not serve to reduce the number of securities registered under, or subject to issuance pursuant to, any of the other plans that were listed in Post-Effective Amendment No. 1.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Greenwood Village, State of Colorado, on August 11, 2022.

ADVANCED EMISSIONS SOLUTIONS, INC.

By: /s/ Greg Marken

Name: Greg Marken

Title: President, Chief Executive Officer and Treasurer

Pursuant to Rule 478 of the Securities Act of 1933, as amended, no other person is required to sign this Post-Effective Amendment No. 2 to the Prior Registration Statement.