As filed with the Securities and Exchange Commission on January 29, 2026

Registration No. 333-

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

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

5E Advanced Materials, Inc.
(Exact name of registrant as specified in its charter)

Delaware	1400	87-3426517
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

9329 Mariposa Road, Suite 210
Hesperia, CA 92344
(442) 221-0225
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Paul Weibel
Chief Executive Officer
5E Advanced Materials, Inc.
9329 Mariposa Road, Suite 210
Hesperia, CA 92344
(442) 221-0225
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Drew Capurro Scott Westhoff Latham & Watkins LLP 650 Town Center Drive, 20th Floor Costa Mesa, CA 92626 (714) 540-1235	Matthew Bernstein Justin Grossman Ellenoff Grossman & Schole LLP 1345 Avenue of the Americas New York, NY 10105 (212) 370-7889

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☒ (File No. 333-292988)

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

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 the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☒

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. ☒

The Registration Statement shall become effective upon filing in accordance with Rule 462(b) promulgated under the Securities Act of 1933, as amended.

EXPLANATORY NOTE;
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

This Registration Statement (this "Registration Statement") is being filed by 5E Advanced Materials, Inc. (the "Registrant") with the Securities and Exchange Commission (the "Commission") pursuant to Rule 462(b) under the Securities Act of 1933, as amended (the "Securities Act"). This Registration Statement incorporates by reference the contents of the Registrant's Registration Statement on Form S-1 (File No. 333-292988), including all amendments and exhibits thereto (the "Prior Registration Statement"), which the Commission declared effective on January 29, 2026, and is being filed solely for the purpose of increasing the maximum aggregate offering price of shares to be offered in the public offering by $6,000,000. The additional shares of Common Stock that are being registered for sale are in an amount and at a price that together represent no more than 20% of the maximum aggregate offering price set forth in the Filing Fee table contained in the Prior Registration Statement.

The required opinion and consents are listed in Part II, Item 16 attached hereto and filed herewith.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

Exhibit No.	Description
5.1	Opinion of Latham & Watkins LLP
23.1	Consent of PricewaterhouseCoopers LLP
23.2	Consent of Latham & Watkins LLP (included in Exhibit 5.1)
23.3	Consent of Miocene, Inc. (incorporated by reference to Exhibit 23.3 to the Registration Statement on Form S-1 (File No. 333-292988) filed with the Securities and Exchange Commission on January 27, 2026)
23.4	Consent of Fluor Enterprises, Inc. (incorporated by reference to Exhibit 23.4 to the Registration Statement on Form S-1 (File No. 333-292988) filed with the Securities and Exchange Commission on January 27, 2026)
23.5	Consent of Geomega, Inc. (incorporated by reference to Exhibit 23.5 to the Registration Statement on Form S-1 (File No. 333-292988) filed with the Securities and Exchange Commission on January 27, 2026)
23.6	Consent of Escalante Geological Services LLC (incorporated by reference to Exhibit 23.6 to the Registration Statement on Form S-1 (File No. 333-292988) filed with the Securities and Exchange Commission on January 27, 2026)
23.7	Consent of Paul Weibel, CPA, 5E Advanced Materials, Inc. (incorporated by reference to Exhibit 23.7 to the Registration Statement on Form S-1 (File No. 333-292988) filed with the Securities and Exchange Commission on January 27, 2026)
24.1	Power of Attorney (incorporated by reference to the signature page of the Registration Statement on Form S-1 (File No. 333-292988) filed with the Securities and Exchange Commission on January 27, 2026)
107	Filing Fee Table

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Hesperia, State of California, on January 29, 2026.

5E ADVANCED MATERIALS, INC.

By: /s/ Paul Weibel
Name: Paul Weibel
Title Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Paul Weibel Paul Weibel	Chief Executive Officer (Principal Executive Officer)	January 29, 2026
/s/ Joshua Malm Joshua Malm	Chief Financial Officer, Treasurer and Corporate Secretary (Principal Financial and Accounting Officer)	January 29, 2026
* Graham van't Hoff	Director	January 29, 2026
* Curt Hébert	Director	January 29, 2026
* Barry Dick	Director	January 29, 2026
* Bryn Jones	Director	January 29, 2026

* By: /s/ Paul Weibel
Paul Weibel
Attorney-in-fact

Exhibit 5.1

LATHAM&WATKINS LLP

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Costa Mesa, California 92626-1925
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London	Tel Aviv
Los Angeles	Tokyo
Madrid	Washington, D.C.

January 29, 2026

5E Advanced Materials, Inc.
9329 Mariposa Road, Suite 210
Hesperia, CA 92344

Re: 5E Advanced Materials, Inc.

To the addressee set forth above:

We have acted as special counsel to 5E Advanced Materials, Inc., a Delaware corporation (the "***Company***"), in connection with the proposed issuance of up to 18,000,000 shares of common stock, $0.01 par value per share (the "***Shares***"). The Shares are included in a registration statement on Form S-1 under the Securities Act of 1933, as amended (the "***Act***"), initially filed with the Securities and Exchange Commission (the "***Commission***") on January 27, 2026 (File No. 333-292988) (as amended, the "***Initial Registration Statement***") and a registration statement relating to the Initial Registration Statement filed pursuant to Rule 462(b) promulgated under the Act (together with the Initial Registration Statement, the "***Registration Statement***").This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or related prospectus, other than as expressly stated herein with respect to the issue of the Shares.

As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. We are opining herein as to the General Corporation Law of the State of Delaware (the "***DGCL***"), and we express no opinion with respect to any other laws.

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof, when the Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the purchasers and have been issued by the Company against payment therefor (not less than par value) in the circumstances contemplated by the form of securities purchase agreement most recently filed as an exhibit to the Registration Statement, the issue and sale of the Shares will have been duly authorized by all necessary corporate action of the Company, and the Shares will be validly issued, fully paid and nonassessable. In rendering the foregoing opinion, we have assumed that the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the DGCL.

LATHAM&WATKINS LLP

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to the Registration Statement and to the reference to our firm in the prospectus under the heading “Legal Matters.” In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Sincerely,

/s/ Latham & Watkins LLP

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-1 of our report dated September 29, 2025 relating to the financial statements, which appears in 5E Advanced Materials, Inc.'s Annual Report on Form 10-K for the year ended June 30, 2025. We also consent to the reference to us under the heading "Experts" in the Registration Statement on Form S-1 (No. 333-292988) incorporated by reference in this Registration Statement.

/s/ PricewaterhouseCoopers LLP
Denver, Colorado
January 29, 2026

Calculation of Filing Fee Tables

S-1

5E Advanced Materials, Inc.

Table 1: Newly Registered and Carry Forward Securities ☐Not Applicable

		Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid in Connection with Unsold Securities to be Carried Forward
Newly Registered Securities													
Fees to be Paid	1	Equity	Common stock, par value $0.01 per share	457(o)			$ 6,000,000.00	0.0001381	$ 828.60				
Fees Previously Paid													
Carry Forward Securities													
Carry Forward Securities													
					Total Offering Amounts:		$ 6,000,000.00		$ 828.60				
					Total Fees Previously Paid:				$ 0.00				
					Total Fee Offsets:				$ 0.00				
					Net Fee Due:				$ 828.60				

Offering Note

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(A) Estimated solely for the purpose of calculating the amount of the registration fee in pursuant to Rule 457(o) under the Securities Act of 1933, as amended (the "Securities Act").

(B) Pursuant to Rule 416 under the Securities Act, this registration statement shall also cover any additional shares of the registrant's securities that become issuable by reason of any share splits, share dividends or similar transactions.

(C) The registrant previously registered securities having an aggregate offering price of $30,000,000 pursuant to a Registration Statement on Form S-1 (File No. 333-292988), which was declared effective by the Securities and Exchange Commission on January 29, 2026. In accordance with Rule 462(b) under the Securities Act, an additional amount of securities having a proposed maximum aggregate offering price of $6,000,000 is registered hereby.

Table 2: Fee Offset Claims and Sources ☑Not Applicable

		Registrant or Filer Name	Form or Filing Type	File Number	Initial Filing Date	Filing Date	Fee Offset Claimed	Security Type Associated with Fee Offset Claimed	Security Title Associated with Fee Offset Claimed	Unsold Securities Associated with Fee Offset Claimed	Unsold Aggregate Offering Amount Associated with Fee Offset Claimed	Fee Paid with Fee Offset Source
Rules 457(b) and 0-11(a)(2)												
Fee Offset Claims	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Fee Offset Sources	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rule 457(p)												
Fee Offset Claims	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fee Offset Sources	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 3: Combined Prospectuses ☑**Not Applicable**

	Security Type	Security Class Title	Amount of Securities Previously Registered	Maximum Aggregate Offering Price of Securities Previously Registered	Form Type	File Number	Initial Effective Date
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A