

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

**Amendment No. 2
to
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

5E Advanced Materials, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

87-3426517
(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 Financial 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 of all communications to:

J. Eric Johnson, Esq.
Winston & Strawn LLP
800 Capitol Street, Suite 2400
Houston, TX 77002
(713) 651-2647

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. ☐

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, other than securities offered only in connection with dividend or interest reinvestment plans, 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, please 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(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 registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. ☐

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. ☐

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 ☐
Non-accelerated filer ☒

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 registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

SUBJECT TO COMPLETION, DATED FEBRUARY 20, 2024

PRELIMINARY PROSPECTUS



\$50,000,000

Common Stock

5E Advanced Materials, Inc. (the “Company”) may offer and sell from time to time, in one or more offerings, shares of the Company’s common stock, par value \$0.01 per share (the “Common Stock”).

We may sell Common Stock in one or more offerings in amounts, at prices and on terms to be determined at the time of the applicable offering. The aggregate initial offering price of all Common Stock sold by us will not exceed \$50,000,000.

This prospectus describes some of the general terms that may apply to these offerings. We will provide specific terms of these offerings in one or more supplements to this prospectus. This prospectus may not be used to sell Common Stock unless accompanied by a prospectus supplement. A prospectus supplement may add, update or change information contained in this prospectus. You should read this prospectus and the accompanying prospectus supplement carefully before you invest.

Our Common Stock may be offered directly, through agents designated from time to time by us, or to or through underwriters or dealers. If any agents or underwriters are involved in the sale of any of our Common Stock, their names, and any applicable purchase price, fee, commission or discount arrangement between or among them, will be set forth in the applicable prospectus supplement or other offering materials.

You should read this prospectus and any prospectus supplement or amendment carefully before you invest in our Common Stock. Our Common Stock is listed on the Nasdaq Global Select Market (“Nasdaq”) under the symbol “FEAM.” On February 16, 2024, the last reported sale price of our Common Stock on Nasdaq was \$1.30 per share.

We are an “emerging growth company” under federal securities laws and are subject to reduced public company reporting requirements. Investing in our Common Stock involves a high degree of risk. See the section titled “Risk Factors” beginning on page 12.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is

TABLE OF CONTENTS

	Page
ABOUT THIS PROSPECTUS	1
TRADEMARKS AND TRADE NAMES	2
SELECTED DEFINITIONS	2
CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	3
CAUTIONARY NOTE REGARDING RESERVES	7
CAUTIONARY NOTE REGARDING EXPLORATION STAGE COMPANIES	9
CAUTIONARY NOTE REGARDING EMERGING GROWTH COMPANY STATUS	9
CAUTIONARY NOTE REGARDING INDUSTRY AND MARKET DATA	9
5E ADVANCED MATERIALS, INC.	10
RISK FACTORS	12
USE OF PROCEEDS	13
DESCRIPTION OF CAPITAL STOCK	14
PLAN OF DISTRIBUTION	17
LEGAL MATTERS	20
EXPERTS	20
WHERE YOU CAN FIND MORE INFORMATION	20
INCORPORATION BY REFERENCE	21

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “SEC”) using a “shelf” registration process. By using a shelf registration statement, we may sell shares of our Common Stock from time to time and in one or more offerings.

This prospectus provides you with a general description of the shares of Common Stock that we may offer. Each time we sell Common Stock, we will provide a prospectus supplement that will contain specific information about the terms of the offered shares and the offering, including a detailed description of the specific amount or amounts of Common Stock to be offered, the prices of the shares of Common Stock, the name of any agent, underwriter or dealer to or through which the shares of Common Stock may be sold and a description of any arrangement with such agent, underwriter or dealer, and information about any securities exchange or automated quotation system on which the shares will be listed.

A prospectus supplement may also add, update or change information included in this prospectus. Any statement contained in this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in such prospectus supplement modifies or supersedes such statement. Any statement so modified will be deemed to constitute a part of this prospectus only as so modified, and any statement so superseded will be deemed not to constitute a part of this prospectus. You should rely only on the information contained in this prospectus, any applicable prospectus supplement and any related free writing prospectus together with the additional information to which we refer you to in the sections of this prospectus entitled “Where You Can Find More Information” and “Incorporation by Reference.”

We have not authorized anyone to provide any information or to make any representations other than those contained in this prospectus, any accompanying prospectus supplement or any free writing prospectus we have prepared. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the Common Stock offered hereby and only under circumstances and in jurisdictions where it is lawful to do so. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus. This prospectus is not an offer to sell Common Stock, and it is not soliciting an offer to buy Common Stock, in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus or any prospectus supplement is accurate only as of the date on the front of those documents, regardless of the time of delivery of this prospectus or any applicable prospectus supplement, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus contains or incorporates by reference summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under “Where You Can Find More Information” and “Incorporation by Reference.”

For investors outside the United States: We have not taken any actions that would permit the possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering and distribution of this prospectus outside the United States.

This prospectus does not contain all of the information included in the registration statement of which it forms a part. For further information, we refer you to the entire registration statement, including its exhibits. Statements contained in this prospectus about the provisions or contents of any contract, agreement or other document are not necessarily complete. For each of these contracts, agreements or documents filed as an exhibit to the registration statement, we refer you to the actual exhibit for a more complete description of the matters involved.

When used in this prospectus and any prospectus supplement, unless otherwise specified or the context otherwise requires, the terms the “Company,” “we,” “our,” and “us” refer to 5E Advanced Materials Inc. together with its consolidated subsidiaries unless the context suggests otherwise.

TRADEMARKS AND TRADE NAMES

This document contains references to trademarks and service marks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that the applicable licensor will not assert, to the fullest extent under applicable law, its rights to these trademarks and trade names. We do not intend our use or display of other companies’ trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

SELECTED DEFINITIONS

“ABR” refers to American Pacific Borates Limited, a company incorporated under the laws of Australia.

“ASX” refers to the Australian Securities Exchange.

“CDI” refers to a CHESS Depositary Interest.

“Common Stock” refers to the Company’s common stock, par value \$0.01 per share.

“Company” refers to 5E Advanced Materials, Inc., a Delaware corporation.

“Corporations Act” refers to the Australian Corporations Act, 2001 (Cth).

“Exchange Act” means the Securities Exchange Act of 1934, as amended.

“Nasdaq” refers to The Nasdaq Global Select Market.

“Reorganization” refers to the transactions pursuant to which, among other things, we (i) issued (a) to eligible shareholders of ABR either one share of our Common Stock for every ten ordinary shares of ABR or one CDI over our Common Stock for every one ordinary share of ABR, in each case, as held on the Scheme record date and (b) to ineligible shareholders proceeds from the sale of the CDIs to which they would otherwise be entitled by a broker appointed by ABR, who sold the CDIs in accordance with the terms of a sale facility agreement and remitted the proceeds to ineligible shareholders, (ii) cancelled each of the outstanding options to acquire ordinary shares of ABR and issued replacement options representing the right to acquire shares of our Common Stock on the basis of a one replacement option for every ten existing ABR options held, (iii) maintained an ASX listing for its CDIs, with each CDI representing 1/10th of a share of Common Stock, (iv) delisted ABR’s ordinary shares from the ASX, and (v) became the parent company to ABR.

“Scheme” refers to a statutory Scheme of Arrangement under Australian law under Part 5.1 of the Corporations Act.

“SEC” means the U.S. Securities and Exchange Commission.

“Securities Act” means the Securities Act of 1933, as amended.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any accompanying prospectus supplement and the documents incorporated by reference herein and therein may include statements that express our and our subsidiaries' opinions, expectations, beliefs, plans, objectives, assumptions or projections regarding future events or future results and therefore are, or may be deemed to be, "forward-looking statements." These forward-looking statements can generally be identified by the use of forward-looking terminology, including the terms "believes," "estimates," "anticipates," "expects," "seeks," "projects," "forecasts," "intends," "plans," "may," "will" or "should" or, in each case, their negative or other variations or comparable terminology. These forward-looking statements include all matters that are not historical facts. They may appear in a number of places throughout this prospectus, any accompanying prospectus supplement and the documents incorporated by reference herein and therein and these forward-looking statements reflect management's expectations regarding our future growth, results of operations, operational and financial performance and business prospects and opportunities. Such forward-looking statements are based on available current market material and management's expectations, beliefs and forecasts concerning future events impacting our business. Factors that may impact such forward-looking statements include, but are not limited to, statements concerning:

- The timing, completion and estimated production capacity of our proposed small-scale facility ("SSF") and proposed large-scale complex;
- The outputs from our proposed SSF and their impact on future estimates and potential studies regarding our proposed large-scale complex;
- Unanticipated costs or delays associated with our proposed SSF;
- Use of our injection-recovery wells for extraction once our proposed SSF and large-scale complex is complete;
- Our ability to successfully and economically extract boron and lithium from colemanite and lithium rich minerals;
- The quantities of resources we expect to be able to extract and our production capabilities;
- The timing of completing and the expected ability of our proposed SSF facility to serve as a foundation for future design, engineering and cost optimization for our proposed large-scale complex;
- Our ability to secure the requisite funding for the successful engineering, development, construction, completion and operation of our proposed facilities;
- The timing and viability of achieving initial commercial production;
- Our ability to commercialize our output and to enter into commercial agreements;
- The total addressable market for materials we intend on producing and selling, including its current size, growth trajectory and the underlying factors that may drive growth in the overall market size;
- The cost and availability of natural gas and electricity;
- Our ability to timely and successfully reach anticipated full commercial production capacity;
- Our ability to achieve and maintain profitability and to develop and maintain positive cash flow from our proposed operating activities;
- Our ability to enter into and deliver product under binding supply agreements;
- Our ability to acquire and maintain the necessary mining licenses, permits and access rights;
- Our ability to acquire and maintain the necessary mineral property interests and related water rights;
- The demand for borates and lithium and the market for their end-use applications; and
- Our ability to develop downstream advanced materials capabilities.

These forward-looking statements are subject to a number of risks and uncertainties, including:

- Our ability to implement and recognize benefits from certain reduced spending measures;
- The substantial doubt regarding our ability to continue as a going concern and our need to raise substantial additional funding, which may not be available on acceptable terms, if at all, to be able to continue as a going concern and advance the Fort Cady Project (the “Project”);
- Our limited operating history in the borates and lithium industries and no revenue from our proposed extraction operations at our properties;
- Our need for substantial additional financing, both in the near-term and long-term, to execute our business plan and our ability to access capital and the financial markets;
- Our status as an exploration stage company dependent on a single project with no known mineral reserves and the inherent uncertainty in estimates of mineral resources;
- Our lack of history in mineral production and the significant risks associated with achieving our business strategies, including our downstream processing ambitions;
- We have incurred significant net operating losses to date and we anticipate incurring continued losses for the foreseeable future;
- Risks and uncertainties relating to the development of the Project in Newberry Springs, CA;
- Risks related to our ability to prepare and update further technical and economic analysis of the Project, and the timing thereof;
- Our dependence on a single project;
- Risks related to our ability to achieve and maintain profitability and to develop positive cash flow from our operating activities;
- Risks, including changes in technology, that could adversely affect the demand for end use applications that require borates, lithium, and related minerals and compounds;
- Our long-term success is dependent on our ability to enter into and deliver product under supply agreements;
- Risks related to estimates of our total addressable market;
- The costs and availability of natural gas, electricity, and water;
- Uncertain global economic conditions and the impact this may have on our business and plans;
- Macroeconomic risks;
- Government efforts to combat inflation, along with other interest rate pressures arising from an inflationary economic environment, could lead to higher financing and project completion costs.
- Risks associated with our ongoing investment in the Project;
- Risks associated with the required infrastructure at the Project;
- Risks related to the titles of our mineral property interests and related water rights;
- Any restrictions on our ability to obtain, recycle, and dispose of water on site;
- Risks related to land use restrictions on our properties;
- Risks related to volatility in prices or demand for borates, lithium, and other minerals;
- Fluctuations in the U.S. dollar relative to other currencies;
- Risks related to mineral exploration and development;

- Risks related to equipment shortages and supply chain disruptions;
- Risks associated with any of our customers, suppliers, or any third parties not implementing ethical or legal business practices in compliance with applicable laws and regulations;
- Competition from new or current competitors in the mineral exploration and mining industry;
- Risks associated with consolidation in the markets in which we operate and expect to operate;
- Risks related to compliance with environmental and regulatory requirements, reclamation requirements, the potential generation and disposal of hazardous waste, climate change, and the proposed SEC rules on climate-related disclosures;
- Risks related to our ability to acquire and maintain necessary mining licenses, permits, or access rights;
- Litigation risk;
- Risks related to our main operations being located in California and our engagement with local communities;
- Our dependence on key management and third parties;
- Risks related to potential acquisitions, joint ventures, and other investments;
- Risks related to public health threats, including the novel coronavirus, that may continue to cause disruptions to our operations or may have a material adverse effect on our development plans and financial results;
- Information technology risks;
- Risks and costs relating to the Reorganization;
- Risks related to the possible dilution of our Common Stock;
- Risks related to our stock price and trading volume volatility;
- Risks relating to the development of an active trading market for our Common Stock;
- Risks related to our status as an emerging growth company;
- Risks related to technology systems and security breaches;
- A shortage of skilled technicians and engineers;
- Risks related to technology systems and security breaches;
- Our facilities of operations could be adversely affected by outside events outside of our control, such as natural disasters, climate change, wars, or health epidemics or pandemics;
- Risks and uncertainties related to the COVID-19 pandemic;
- Our increased costs as a result of being a U.S. listed public company;
- Strategic actions, including acquisitions and dispositions of investments, including but not limited to integrations of acquiring investments;
- Risks associated with the Convertible Notes;
- Risk of insufficient cash flow to service the Convertible Notes;
- Risk of foreclosure on our assets if we default on the Convertible Notes;
- Risk of dilution of the ownership interest of our existing stockholders if the Convertible Notes are converted;
- Risk of adverse impact on the price of our Common Stock if the Convertible Notes are converted;

- Risks associated with limitations on our ability to raise money through equity offerings and to incur additional indebtedness imposed by the Amended and Restated Note Purchase Agreement; and
- Any other risks described elsewhere in this registration statement or the documents incorporated herein by reference.

If any of these risks materialize or our assumptions prove incorrect, actual results could differ materially from the results implied by these forward-looking statements.

These and other factors that could cause actual results to differ from those implied by the forward-looking statements in this prospectus, any accompanying prospectus supplement and the documents incorporated by reference herein and therein are more fully described under the heading “Risk Factors” and elsewhere in this prospectus. The risks described under the heading “Risk Factors” are not exhaustive. Other sections of this prospectus and any accompanying prospectus supplement describe additional factors that could adversely affect the business, financial condition or results of operations of the Company. New risk factors emerge from time to time and it is not possible to predict all such risk factors, nor can the Company assess the impact of all such risk factors on the business of the Company or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statements. All forward-looking statements attributable to the Company or persons acting on its behalf are expressly qualified in their entirety by the foregoing cautionary statements. The Company undertakes no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

CAUTIONARY NOTE REGARDING RESERVES

Unless otherwise indicated, all mineral resource estimates included in this prospectus have been prepared in accordance with, and are based on the relevant definitions set forth in, the SEC's Mining Disclosure Rules and Regulation S-K 1300 (each as defined below). Mining disclosure in the United States was previously required to comply with SEC Industry Guide 7 (the "SEC Industry Guide 7") under the Exchange Act. In accordance with the SEC's Final Rule 13-10570, Modernization of Property Disclosure for Mining Registrant, the SEC has adopted final rules, effective February 25, 2019, to replace SEC Industry Guide 7 with new mining disclosure rules (the "Mining Disclosure Rules") under sub-part 1300 (Title 17, Part 229, Items 601 and 1300 until 1305) of Regulation S-K of the Securities Act ("Regulation S-K 1300"). Regulation S-K 1300 replaces the historical property disclosure requirements included in SEC Industry Guide 7. Regulation S-K 1300 uses the Committee for Mineral Reserves International Reporting Standards ("CRIRSCO")-based classification system for mineral resources and mineral reserves and accordingly, under Regulation S-K 1300, the SEC now recognizes estimates of "Measured Mineral Resources," "Indicated Mineral Resources" and "Inferred Mineral Resources," and require SEC-registered mining companies to disclose in their SEC filings specified information concerning their mineral resources, in addition to mineral reserves. In addition, the SEC has amended its definitions of "Proven Mineral Reserves" and "Probable Mineral Reserves" to be substantially similar to international standards. The SEC Mining Disclosure Rules more closely align SEC disclosure requirements and policies for mining properties with current industry and global regulatory practices and standards, including the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, referred to as the "JORC Code." While the SEC now recognizes "Measured Mineral Resources," "Indicated Mineral Resources" and "Inferred Mineral Resources" under the SEC Mining Disclosure Rules, investors should not assume that any part or all of the mineral deposits in these categories will be converted into a higher category of mineral resources or into mineral reserves.

The following terms, as defined in Regulation S-K 1300, apply within this prospectus:

Measured Mineral Resource

("Measured" or "Measured Mineral Resource")

that is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of conclusive geological evidence and sampling. The level of geological certainty associated with a measured mineral resource is sufficient to allow a qualified person to apply modifying factors in sufficient detail to support detailed mine planning and final evaluation of the economic viability of the deposit. Because a measured mineral resource has a higher level of confidence than the level of confidence of either an indicated mineral resource or an inferred mineral resource, a measured mineral resource may be converted to a proven mineral reserve or to a probable mineral reserve.

Indicated Mineral Resource

("Indicated" or "Indicated Mineral Resource")

is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The level of geological certainty associated with an indicated mineral resource is sufficient to allow a qualified person to apply modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Because an indicated mineral resource has a lower level of confidence than the level of confidence of a measured mineral resource, an indicated mineral resource may only be converted to a probable mineral reserve.

Inferred Mineral Resource
 (“Inferred” or “Inferred Mineral Resource”)

is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The level of geological uncertainty associated with an inferred mineral resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an inferred mineral resource has the lowest level of geological confidence of all mineral resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred mineral resource may not be considered when assessing the economic viability of a mining project, and may not be converted to a mineral reserve.

Probable Mineral Reserve
 (“Probable” or “Probable Mineral Reserve”)

is the economically mineable part of an indicated and, in some cases, a measured mineral resource.

Proven Mineral Reserve
 (“Proven” or “Proven Mineral Reserve”)

is the economically mineable part of a measured mineral resource and can only result from conversion of a measured mineral resource.

The Company released an amended and restated technical report on Form 10-K/A with a revised report date of February 2, 2024, report date of May 11, 2023, and report effective date of April 1, 2023 (the “Amended Initial Assessment Report”). The purpose of the Amended Initial Assessment Report is to support the disclosure of mineral resource estimates for the Project. The Amended Initial Assessment Report was prepared in accordance with the SEC’s Mining Disclosure Rules and Regulation S-K Subpart 1300 and Item 601(b)(96) (technical report summary). The Amended Initial Assessment Report is discussed in Business and Properties and incorporated by reference as Exhibit 96.1 to this registration statement.

UNLESS OTHERWISE EXPRESSLY STATED, NOTHING CONTAINED IN THIS PROSPECTUS IS, NOR DOES IT PURPORT TO BE, A TECHNICAL REPORT SUMMARY PREPARED BY A QUALIFIED PERSON PURSUANT TO AND IN ACCORDANCE WITH THE REQUIREMENTS OF SUBPART 1300 OF SECURITIES EXCHANGE COMMISSION REGULATION S-K.

CAUTIONARY NOTE REGARDING EXPLORATION STAGE COMPANIES

We are an exploration stage company and do not currently have any known mineral reserves and cannot expect to have known mineral reserves unless and until an appropriate technical and economic study is completed for Fort Cady or any of our other properties that shows Proven or Probable Mineral Reserves as defined by Regulation S-K 1300. We currently do not have any Proven or Probable Mineral Reserves. There can be no assurance that Fort Cady or any of our other properties contains or will contain any such SEC-compliant Proven or Probable Mineral Reserves or that, even if such reserves are found, the quantities of any such reserves warrant continued operations or that we will be successful in economically recovering them.

CAUTIONARY NOTE REGARDING EMERGING GROWTH COMPANY STATUS

Section 102(b)(1) of the Jumpstart Our Business Startups Act (“JOBS Act”) exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. We have elected not to opt out of such extended transition period which means that when a standard is issued or revised and it has different application dates for public or private companies, we, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard, until such time we are no longer considered to be an emerging growth company. At times, we may elect to adopt a new or revised standard early.

CAUTIONARY NOTE REGARDING INDUSTRY AND MARKET DATA

This prospectus includes information concerning our industry and the markets in which we will operate that is based on information from various sources including public filings, internal company sources, various third-party sources and management estimates. Our management estimates regarding our position, share and industry size are derived from publicly available information and its internal research, and are based on a number of key assumptions made upon reviewing such data and our knowledge of such industry and markets, which we believe to be reasonable. While we believe the industry, market and competitive position data included in this prospectus is reliable and is based on reasonable assumptions, such data is necessarily subject to a high degree of uncertainty and risk and is subject to change due to a variety of factors, including those described in “Cautionary Note Regarding Forward-Looking Statements,” “Risk Factors” and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates included in this prospectus. We have not independently verified any data obtained from third-party sources and cannot assure you of the accuracy or completeness of such data.

5E ADVANCED MATERIALS, INC.

Company Overview

We are focused on becoming a vertically integrated global leader and supplier of boron specialty and advanced materials, complemented by lithium co-product production. Our mission is to become a supplier of these critical materials to industries addressing global decarbonization, food, and domestic security. Boron and lithium products will target applications in the fields of electric transportation, clean energy infrastructure, such as solar and wind power, fertilizers, and domestic security. The business strategy and objectives are to develop capabilities ranging from upstream extraction and product sales of boric acid, lithium carbonate, and potentially other co-products, to downstream boron advanced material processing and development. The business is based on our large domestic boron and lithium resource, which is located in Southern California and designated as Critical Infrastructure by the Department of Homeland Security's Cybersecurity and Infrastructure Security Agency.

Recent Developments

Special Meeting of Stockholders

On January 12, 2024, we held a Special Meeting of Stockholders (the "Special Meeting") where the following matters were voted upon and approved by our stockholders:

1. An amendment to our certificate of incorporation to increase the number of authorized shares of Common Stock from 180,000,000 to 360,000,000 (the "Amended and Restated Certificate of Incorporation");
2. The issuance of up to \$35 million of our Common Stock at a price per share of \$1.025 (the "Securities Offering") to Ascend and 5ECAP, and including a \$10 million option to purchase shares of Common Stock to Bluescape; and
3. The issuance of additional shares of our Common Stock upon conversion of our Convertible Notes.

On January 12, 2024, we filed our Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware.

Restructuring Transactions

Amended and Restated Note Purchase Agreement

On January 18, 2024, we entered into the Amended and Restated Note Purchase Agreement, pursuant to which the Convertible Notes, as amended and restated, bear interest at 4.50% per annum, payable semi-annually, or 10.00% per annum if we elect to pay such interest through the delivery of additional Convertible Notes, and are convertible into 66,261,621 shares of Common Stock at a conversion price of \$1.5375 per share of Common Stock (assuming all accrued interest is paid-in-kind until maturity) in accordance with the terms of the Amended and Restated Note Purchase Agreement. The Convertible Notes mature on August 15, 2028. Following certain corporate events that may occur prior to the maturity date, we will, in certain circumstances, increase the conversion rate for a holder who elects to convert its Convertible Notes in connection with such a corporate event. In addition, the minimum cash covenant has been waived through June 28, 2024, with a reduction in such covenant thereafter from \$10 million to \$7.5 million.

In connection with the amendment and restatement, Ascend and Meridian each acquired twenty-five percent (25%) of the outstanding principal amount of the Convertible Notes (including accrued interest paid-in-kind) held by Bluescape.

First Closing of Private Placement

On January 18, 2024, pursuant to the Ascend Subscription Agreement and the Amended and Restated 5ECAP Subscription Agreement, we issued (i) 5,365,854 shares to Ascend at a price of \$1.025 per share, which shares

include the placement fee paid to Ascend in shares of Common Stock and (ii) 5,365,854 shares of Common Stock to 5ECAP at a price of \$1.025 per share, which shares include the placement fee paid to 5ECAP in shares of Common Stock (the “First Closing”).

Second Closing of Private Placement

On January 29, 2024, pursuant to the Amended and Restated 5ECAP Subscription Agreement, we issued 8,317,074 additional shares of Common Stock to 5ECAP, at a price of \$1.025 per share, which shares include the placement fee paid to 5ECAP in shares of Common Stock (the “Second Closing”).

Amended and Restated Investor and Registration Rights Agreement

On January 18, 2024, in connection with the Amended and Restated Note Purchase Agreement, we entered into the A&R IRRA. Pursuant to the A&R IRRA, the Company granted Ascend, 5ECAP, Meridian, and Bluescape registration rights, which are the subject of a separate resale registration statement.

Corporate Information

We were incorporated in the State of Delaware on September 23, 2021 for the purposes of effecting the Reorganization. Our principal executive offices are located at 9329 Mariposa Road, Ste 210, Hesperia, CA 92344 and our telephone number is (442) 221-0225. We maintain a website on the Internet at <http://www.5eadvancedmaterials.com>. Information contained on the website does not constitute a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Implications of Being a Smaller Reporting Company

We are a “smaller reporting company” meaning that the market value of our Common Stock held by non-affiliates is less than \$250.0 million measured on the last business day of our second fiscal quarter or our annual revenue is less than \$100.0 million during the most recent completed fiscal year and the market value of our Common Stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter. Accordingly, we may provide less public disclosure than larger public companies, including the inclusion of only two years of financial statements and only two years of management’s discussion and analysis of financial condition and results of operations disclosure. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

RISK FACTORS

Investing in our Common Stock involves risk. Before making an investment decision, you should carefully consider the specific risks set forth under the caption “Risk Factors” in the applicable prospectus supplement and under the caption “Risk Factors” and elsewhere in our most recent Annual Report on Form 10-K, as amended, our Quarterly Report on Form 10-Q for the quarter ended December 31, 2023, any subsequently filed Quarterly Reports on Form 10-Q, any subsequently filed Current Reports on Form 8-K, our Definitive Proxy Statement filed with the SEC on December 18, 2023, which are incorporated by reference in this prospectus. See “Incorporation by Reference.”

USE OF PROCEEDS

Unless otherwise indicated in the applicable prospectus supplement, the net proceeds from the sale of any Common Stock offered by us pursuant to this prospectus will be used for general corporate purposes. General corporate purposes may include, without limitation:

- working capital;
- capital expenditures;
- advances to or investments in our subsidiaries;
- repayment of outstanding debt;
- repurchases of shares of our Common Stock, par value \$0.01 per share; and
- acquisitions of or investments in other businesses.

Pending any specific application described in the applicable prospectus supplement, net proceeds may be initially invested in short-term interest-bearing accounts, securities or similar investments.

DESCRIPTION OF CAPITAL STOCK

Description of Capital Stock

The following description of our capital stock is a summary. The complete text of our Amended and Restated Certificate of Incorporation and Bylaws are each included as exhibits to this registration statement and are incorporated by reference herein. Our authorized share capital is 380,000,000 divided into 360,000,000 shares of Common Stock, par value of \$0.01 per share, and 20,000,000 shares of preferred stock, par value of \$0.01 per share (“Preferred Stock”). As of February 16, 2024, there are approximately 63,285,836 shares of our Common Stock issued and outstanding held by approximately 19 record holders. As of February 16, 2024, no shares of Preferred Stock are issued and outstanding. The actual number of stockholders is considerably greater than the number of stockholders of record and includes stockholders who are beneficial owners but whose CDIs or shares of Common Stock are held in street name by brokers and other nominees.

Common Stock

Except as otherwise required by law, as provided in our Certificate of Incorporation or as provided in the resolution or resolutions, if any, adopted by our Board of Directors (our “Board”) with respect to any series of the Preferred Stock, the holders of our Common Stock will exclusively possess all voting power. Each holder of shares of Common Stock will be entitled to one vote for each share held by such holder. Subject to the rights of holders of any series of outstanding Preferred Stock, holders of shares of our Common Stock will have equal rights of participation in the dividends and other distributions in cash, stock or property of the Company when, as and if declared thereon by our Board from time to time out of assets or funds legally available therefor and will have equal rights to receive the assets and funds of the Company available for distribution to stockholders in the event of any liquidation, dissolution or winding up of the affairs of the Company, whether voluntary or involuntary.

CDIs

CDIs confer the beneficial ownership of our Common Stock on each CDI holder, with the legal title to such securities held by an Australian depositary entity, CHESS Depositary Nominees Pty Ltd. (the “Depositary Nominee”). The Depositary Nominee will be the registered holder of those shares of our Common Stock held for the benefit of holders of CDIs. The Depositary Nominee does not charge a fee for providing this service. Ten CDIs will represent an interest in one share of our Common Stock. Holders of CDIs will not hold the legal title to the underlying shares of our Common Stock to which the CDIs relate, as the legal title will be held by the Depositary Nominee. Each holder of CDIs will, however, have a beneficial interest in the underlying shares in our Common Stock. Each holder of CDIs that elects to vote at a stockholders meeting will be entitled to one vote for every 10 CDIs held by such holder. In order to vote at a stockholder meeting, a CDI holder may:

- instruct the Depositary Nominee, as legal owner of the shares of Common Stock, to vote the Common Stock represented by their CDIs to vote the shares of our Common Stock represented by their CDIs in a particular manner. A voting instruction form will be sent to holders of CDIs and must be completed and returned to the share registry for the CDIs prior to a record date fixed for the relevant meeting, or the Voting Instruction Receipt Time, which is notified to CDI holders in the voting instructions included in a notice of meeting;
- inform us that they wish to appoint themselves or a third party as the Depositary Nominee’s proxy with respect to our shares of Common Stock underlying the holder’s CDIs for the purposes of attending and voting at the meeting. The instruction form must be completed and returned to the share registry for the CDI prior to the CDI Voting Instruction Receipt Time; or
- convert their CDIs into shares of our Common Stock and vote those shares at the meeting. The conversion must be undertaken prior to a record date fixed by the Board for determining the entitlement of members to attend and vote at the meeting. If the holder later wishes to sell their

investment on the ASX, it would first be necessary to convert those shares of Common Stock back to CDIs. Further details on the conversion process are set out below.

Voting instruction forms and details of these alternatives are included in each notice of meeting sent to CDI holders by the Company.

Conversion of CDIs to shares of Common Stock

CDI holders may at any time convert their CDIs to a holding of shares of Common Stock by instructing the share registry for the CDIs, either:

- Directly in the case of CDIs held on the issuer sponsored sub-register operated by the Company (holders of CDIs will be provided with a CDI issuance request form to return to the share registry for the CDIs); or
- Through their “sponsoring participant” (usually their broker) in the case of CDIs which are held on the CHESS sub-register (in this case, the sponsoring broker will arrange for completion of the relevant form and its return to the share registry for the CDIs).

In both cases, once the share registry for the CDIs has been notified, it will arrange the transfer of the relevant number of shares of Common Stock from the Depositary Nominee into the name of the CDI holder in book entry form or, if requested, deliver the relevant shares of Common Stock to their DTC participant in the United States Central Securities Depository. The share registry for the CDIs will not charge a fee for the conversion (although a fee may be payable by market participants). Holding shares of Common Stock will, however, prevent a person from selling their shares of Common Stock on the ASX, as only CDIs can be traded on that market.

Conversion of shares of Common Stock to CDIs

Shares of Common Stock may be converted into CDIs and traded on the ASX. Holders of shares of Common Stock may at any time convert those shares to CDIs by contacting the Company’s transfer agent. The underlying shares of Common Stock will be transferred to the Depositary Nominee, and CDIs (and a holding statement for the corresponding CDIs) will be issued to the relevant security holder. No trading in the CDIs may take place on the ASX until this conversion.

The Company’s transfer agent will not charge a fee to a holder of shares of Common Stock seeking to convert their shares of Common Stock to CDIs, although a fee may be payable by market participants.

In either case, it is expected that each of the above processes will be completed within 24 hours, provided that the Company’s transfer agent is in receipt of a duly completed and valid request form. No guarantee can, however, be given about the time required for this conversion to take place.

Dividends and Other Shareholder Entitlements

Holders of CDIs are entitled to receive all the direct economic benefits and other entitlements in relation to the underlying shares of Common Stock that are held by the Depositary Nominee, including dividends and other entitlements that attach to the underlying shares of Common Stock.

It is possible that marginal differences may exist between the resulting entitlement of a holder of CDIs and the entitlements that would have accrued if a holder of CDIs held their holding directly as shares of Common Stock. As the ratio of CDIs to Common Stock is not one-to-one, and any entitlement will be determined on the basis of shares of Common Stock rather than CDIs, a holder of CDIs may not always benefit to the same extent (e.g. from the rounding up of fractional entitlements). We will, however, be required by the ASX Settlement Rules to minimize any such differences where legally permissible. If a cash dividend or any other cash distribution is declared in a currency other than Australian dollars, we currently intend to convert that dividend or other cash distribution to which a holder of CDIs is entitled to Australian dollars and distribute it to the relevant holder of CDIs in accordance with their entitlement.

Due to the need to convert dividends from United States dollars to Australian dollars in the above mentioned circumstances, holders of CDIs may potentially be advantaged or disadvantaged by exchange rate fluctuations, depending on whether the Australian dollar weakens or strengthens against the United States dollar during the period between the resolution to pay a dividend and conversion into Australian dollars.

Takeovers

If a takeover bid is made in respect of any of our Common Stock of which the Depositary Nominee is the registered holder, the Depositary Nominee is prohibited from accepting the offer made under the takeover bid except to the extent that acceptance is authorized by the CDI holders in respect of the shares of Common Stock represented by their holding of CDIs.

The Depositary Nominee must accept a takeover offer in respect of shares of Common Stock represented by a holding of CDIs if the relevant holder of CDIs instructs it to do so and must notify the entity making the takeover bid of the acceptance.

Preferred Stock

Our Board is authorized to provide, out of the unissued shares of Preferred Stock, for one or more series of Preferred Stock and, with respect to each such series, to fix the number of shares constituting such series and the designation of such series, the voting powers, if any, of the shares of such series, and the preferences and relative, participating, optional or other special rights, if any, and any qualifications, limitations or restrictions thereof, of the shares of such series, as are stated in the resolution or resolutions providing for the issuance of such series adopted by the Board. The authority of the Board with respect to each series of Preferred Stock includes determination of the following:

- the designation of the series;
- the number of shares of the series;
- the dividend rate or rates on the shares of that series, whether dividends will be cumulative and, if so, from which date or dates, and the relative rights of priority, if any, of payment of dividends on shares of that series;
- whether the series will have voting rights in addition to the voting rights provided by law and, if so, the terms of such voting rights;
- whether the series will have conversion privileges and, if so, the terms and conditions of such conversion, including provision for adjustment of the conversion rate in such events as the Board determines;
- whether or not the shares of that series will be redeemable, in whole or in part, at the option of the Company or the holder thereof and, if made subject to such redemption, the terms and conditions of such redemption, including the date or dates upon or after which they will be redeemable, and the amount per share payable in case of redemptions, which amount may vary under different conditions and at different redemption rates;
- the terms and amount of any sinking fund provided for the purchase or redemption of the shares of such series;
- the rights of the shares of that series in the event of voluntary or involuntary liquidation, dissolution or winding up of the Company, and the relative rights of priority, if any, of payment of shares of that series;
- the restrictions, if any, on the issue or reissue of any additional Preferred Stock; and
- any other relative rights, preferences and limitations of that series.

PLAN OF DISTRIBUTION

We may sell the Common Stock offered under this prospectus in one or more of the following ways (or in any combination) from time to time:

- to or through underwriters;
- through agents;
- through brokers or dealers;
- directly to purchasers, including through a specific bidding, auction or other process or in privately negotiated transactions;
- sales “at the market” to or through a market maker or into an existing trading market, on an exchange, or otherwise;
- through a combination of such methods; or
- through any other method permitted by applicable law.

A supplement to this prospectus will describe the particular terms of any offering of Common Stock, including the following:

- the names of any underwriters, agents, brokers or dealers or any selling security holders;
- the purchase price of the Common Stock and the proceeds to be received from the sale;
- any discounts or commissions and other items constituting underwriters’ or agents’ compensation;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchanges on which the Common Stock may be listed.

If underwriters are used in the sale, such underwriters will acquire the Common Stock for their own account. The underwriters may resell the Common Stock in one or more transactions, at a fixed price or prices, which may be changed, or at market prices prevailing at the time of sale, at prices relating to prevailing market prices or at negotiated prices.

The Common Stock may be offered to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. The obligations of the underwriters to purchase the Common Stock will be subject to certain conditions. The underwriters will be obligated to purchase all the Common Stock offered if any of the Common Stock are purchased.

We may sell the Common Stock through agents or dealers designated by us or them. Any agent or dealer involved in the offer or sale of the Common Stock for which this prospectus is delivered will be named, and any commissions payable to that agent or dealer by us or the selling security holders will be set forth, in the prospectus supplement. Unless indicated in the prospectus supplement, the agents will agree to use their reasonable efforts to solicit purchases for the period of their appointment and any dealer will purchase the Common Stock from us as principal and may resell those shares of Common Stock at varying prices to be determined by the dealer.

Underwriters, dealers or agents may facilitate the marketing of an offering online directly or through one of their affiliates. In those cases, prospective investors may view offering terms and a prospectus online and, depending upon the particular underwriter, dealer or agent, place orders online or through their financial advisors.

We also may sell the Common Stock directly. In this case, no underwriters or agents would be involved.

Underwriters, dealers and agents that participate in the distribution of the Common Stock may be deemed to be “underwriters” within the meaning of the Securities Act and any discounts, concessions, commissions or fees received by them from us and any profit on the resale of the Common Stock sold by them may be deemed to be underwriting discounts or commissions under the Securities Act.

We may have agreements with the underwriters, dealers and agents to indemnify them against certain civil liabilities, including liabilities under the Securities Act, or to contribute with respect to payments which the underwriters, dealers or agents may be required to make, and to reimburse them for certain expenses.

In compliance with the guidelines of the Financial Industry Regulatory Authority (“FINRA”), the aggregate maximum discount, commission, fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed eight percent (8%) of the gross proceeds of any offering pursuant to this prospectus and any applicable prospectus supplement.

If at the time of any offering made under this prospectus a member of FINRA participating in the offering has a “conflict of interest” as defined in FINRA Rule 5121 (“Rule 5121”), that offering will be conducted in accordance with the relevant provisions of Rule 5121.

Underwriters, dealers and agents may engage in transactions with, or perform services for, us or our subsidiaries in the ordinary course of their businesses.

In order to facilitate the offering of the Common Stock, any underwriters or agents, as the case may be, involved in the offering of such Common Stock may engage in transactions that stabilize, maintain or otherwise affect the price of our Common Stock. Specifically, the underwriters or agents, as the case may be, may overallocate in connection with the offering, creating a short position in our Common Stock for their own account. In addition, to cover overallocations or to stabilize the price of our Common Stock, the underwriters or agents, as the case may be, may bid for, and purchase, such Common Stock in the open market. Finally, in any offering of Common Stock through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allotted to an underwriter or a dealer for distributing such Common Stock in the offering if the syndicate repurchases previously distributed Common Stock in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the Common Stock above independent market levels. The underwriters or agents, as the case may be, are not required to engage in these activities, and may end any of these activities at any time.

We may solicit offers to purchase the Common Stock directly from, and we or it may sell such Common Stock directly to, institutional investors or others. The terms of any of those sales, including the terms of any bidding or auction process, if utilized, will be described in the applicable prospectus supplement.

It is possible that one or more underwriters may make a market in our Common Stock, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for our Common Stock which is listed on Nasdaq under the symbol “FEAM.”

We may authorize underwriters, dealers or agents to solicit offers by certain purchasers to purchase our Common Stock at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. The contracts will be subject only to those conditions set forth in the prospectus supplement, and the prospectus supplement will set forth any commissions we pay for solicitation of these contracts.

We may enter into derivative transactions with third parties, or sell Common Stock not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the parties may sell Common Stock covered by this prospectus and the

applicable prospectus supplement, including short sale transactions. If so, the third party may use Common Stock pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of Common Stock, and may use Common Stock received from us in settlement of those derivatives to close out any related open borrowings of Common Stock. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement or a post-effective amendment to the registration statement of which this prospectus forms a part. In addition, we may otherwise loan or pledge Common Stock to a financial institution or other third party that in turn may sell the Common Stock short using this prospectus. Such financial institution or other third party may transfer its economic short position to investors in our Common Stock or in connection with a concurrent offering of Common Stock.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us in the ordinary course of business.

LEGAL MATTERS

The validity of the Common Stock offered under this prospectus will be passed upon for us by Winston & Strawn LLP. Certain legal matters with respect to the validity of the Common Stock offered under this prospectus will be passed upon for any underwriters, dealers or agents by counsel named in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements as of June 30, 2022 and for the year then ended incorporated by reference in this Prospectus and in the Registration Statement have been so incorporated in reliance on the report of BDO USA, LLP (n/k/a BDO USA, P.C.), an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

The financial statements as of June 30, 2023 and for the year ended June 30, 2023 incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended June 30, 2023 have been so incorporated in reliance on the report (which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in Note 1 to the financial statements) of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. For further information with respect to the Company and its Common Stock, reference is made to the registration statement and the exhibits and any schedules filed therewith. Statements contained in this prospectus as to the contents of any contract or other document referred to are not necessarily complete and in each instance, if such contract or document is filed as an exhibit, reference is made to the copy of such contract or other document filed as an exhibit to the registration statement, each statement being qualified in all respects by such reference. The SEC maintains a website at www.sec.gov, from which interested persons can electronically access the registration statement, including the exhibits and any schedules thereto and which contains the periodic reports, proxy and information statements and other information that we file electronically with the SEC.

We also maintain an Internet website at www.5eadvancedmaterials.com. Through our website, we make available, free of charge, the following documents of 5E Advanced Materials, Inc. as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC: Annual Reports on Form 10-K; proxy statements for our annual and special shareholder meetings; Quarterly Reports on Form 10-Q; Current Reports on Form 8-K; Forms 3, 4 and 5; Schedules 13G and Schedules 13D; and amendments to those documents. The information contained on, or that may be accessed through, our website is not part of, and is not incorporated into, this prospectus or the registration statement of which it forms a part.

INCORPORATION BY REFERENCE

The rules of the SEC allow us to incorporate information into this prospectus by reference. This means that we are disclosing important information to you by referring to other documents. The information incorporated by reference is considered to be part of this prospectus, except for any information superseded by information contained directly in this prospectus. We incorporate by reference the documents listed below and all documents that we subsequently file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of the offering of Common Stock by means of this prospectus, from their respective filing dates (other than any portions thereof, which under the Exchange Act, and applicable SEC rules, are not deemed “filed” under the Exchange Act):

- the description of our capital stock as set forth in our Current Report on Form 8-K/A filed with the SEC on February 2, 2024;
- our Annual Report on Form 10-K for the year ended June 30, 2023 filed with the SEC on August 30, 2023 and as amended by our amended Annual Report on Form 10-K/A filed with the SEC on October 27, 2023, as further amended by our amended Annual Report on Form 10-K/A filed with the SEC on February 2, 2024, and as further amended by our amended Annual Report on Form 10-K/A filed with the SEC on February 20, 2024;
- our Definitive Proxy Statement on Schedule 14A filed on December 18, 2023;
- our Quarterly Reports on Form 10-Q for the quarterly periods ended September 30, 2023 and December 31, 2023, filed with the SEC on November 9, 2023 and February 14, 2024, respectively; and
- our Current Reports on Form 8-K (or Form 8-K/A, as applicable) filed with the SEC on September 11, 2023, November 9, 2023, November 22, 2023, December 6, 2023, December 11, 2023, December 14, 2023, December 19, 2023, January 16, 2024, January 19, 2024, January 29, 2024, January 30, 2024, and February 2, 2024.

The information incorporated by reference into this prospectus is an important part of this prospectus. Neither we nor any underwriters have authorized anyone to provide you with information other than that contained in or incorporated by reference into this prospectus. You should not assume that the information in this prospectus is accurate as of any date other than the date of this prospectus.

You should not rely on or assume the accuracy of any representation or warranty in any agreement that we have filed as an exhibit to any document that we have publicly filed or that we may otherwise publicly file in the future because such representation or warranty may be subject to exceptions and qualifications contained in separate disclosure schedules, may have been included in such agreement for the purpose of allocating risk between the parties to the particular transaction, and may no longer continue to be true as of any given date.

If we have incorporated by reference any statement or information in this prospectus and we subsequently modify that statement or information with information contained in this prospectus, the statement or information previously incorporated in this prospectus is also modified or superseded in the same manner.



\$50,000,000

Common Stock

PROSPECTUS

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the estimated fees and expenses payable by the registrant in connection with the offering and sale of our Common Stock:

SEC registration fee	\$	*
Printing and engraving expenses		*
Legal fees and expenses		*
Accounting fees and expenses		*
Miscellaneous		*
Total	\$	*

* Estimated expenses are not presently known. The applicable prospectus supplement or one or more Current Reports on Form 8-K, which will be incorporated by reference, will set forth the estimated amount of such expenses payable in respect of any offering of the Common Stock.

We will bear all costs, expenses and fees in connection with the registration of the Common Stock, including with regard to compliance with state securities or “blue sky” laws. All amounts are estimates except the SEC registration fee and the FINRA filing fee.

Item 15. Indemnification of Directors and Officers.

Section 145 of the DGCL provides, generally, that a corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation against all expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. A corporation may similarly indemnify such person for expenses actually and reasonably incurred by such person in connection with the defense or settlement of any action or suit by or in the right of the corporation, provided that such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in the case of claims, issues and matters as to which such person shall have been adjudged liable to the corporation, provided that a court shall have determined, upon application, that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which such court shall deem proper.

In accordance with Section 102(b)(7) of the DGCL, our Certificate of Incorporation provides that a director will not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director’s duty of loyalty to us or our stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit. No such provision shall eliminate or limit the liability of a director for any act or omission occurring prior to the date when such provision became effective. Accordingly, these provisions will have no effect on the availability of equitable remedies such as an injunction or rescission based on a director’s breach of his or her duty of care.

The Certificate of Incorporation provides that we will indemnify its present and former directors and officers to the maximum extent permitted by the DGCL and that such indemnification will not be exclusive of any other rights to which those seeking indemnification may be entitled under any bylaw provision, agreement, vote of stockholders or disinterested directors or otherwise.

Item 16. Exhibits.

Exhibit No.	Description
1.1*	Form of Underwriting Agreement.
2.1#	Scheme Implementation Agreement dated as of October 11, 2021 between American Pacific Borates Limited and 5E Advanced Materials, Inc. (incorporated by reference to Exhibit 2.1 to the Company's Registration Statement on Form 10-12B filed with the SEC on March 7, 2022)
3.1	Amended and Restated Certificate of Incorporation, dated January 12, 2024 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on January 19, 2024)
3.2	Amended and Restated Bylaws of 5E Advanced Materials, Inc. (incorporated by reference to Exhibit 3.2 to the Company's Registration Statement on Form 10-12B filed with the SEC on March 7, 2022)
4.1	Description of Capital Stock of 5E Advanced Materials, Inc. (incorporated by reference to Exhibit 4.1 to the Company's Amended Current Report on Form 8-K/A filed with the SEC on February 2, 2024)
5.1	Opinion of Winston & Strawn LLP
23.1	Consent of BDO USA, P.C.
23.2	Consent of PricewaterhouseCoopers LLP
23.3	Consent of Winston & Strawn LLP (included in opinion filed as Exhibit 5.1)
23.4	Consent of Barr Engineering Co.
23.5	Consent of Mike Rockandel Consulting LLC
23.6	Consent of Louis Fourie, P.Geo., Principal, Terra Modeling Services
23.7	Consent of Mathew Banta, PH, Principal, Confluence Water Resources LLC
23.8	Consent of Escalante Geological Services LLC
23.9	Consent of Paul Weibel, CPA, Chief Financial Officer, 5E Advanced Materials, Inc.
24.1**	Power of Attorney (see Signature page)
96.1	Amended Initial Assessment Report (February 2024) (incorporated by reference to Exhibit 96.1 to the Company's Annual Report on Form 10-K/A filed with the SEC on February 2, 2024)
107**	Filing Fee Table

* To be filed, if necessary, by an amendment to this registration statement or incorporated by reference pursuant to a Current Report on Form 8-K in connection with the offering of securities registered hereunder.

** Previously filed.

Schedules have been omitted pursuant to Items 601(a)(5) and 601(b)(2) of Regulation S-K. The Company hereby undertakes to furnish supplemental copies of any of the omitted schedules upon request by the U.S. Securities and Exchange Commission. The Company may request confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended, for any schedules so furnished.

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

- A. To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (A)(i), (A)(ii) and (A)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or 15(d) of the Exchange Act that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- B. That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- C. To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- D. That, for the purpose of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- E. That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- F. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- G. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and 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 February 20, 2024.

5E ADVANCED MATERIALS, INC.

By: /s/ Paul Weibel

Paul Weibel
Chief Financial Officer

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

<u>Signatures</u>	<u>Title</u>	<u>Date</u>
* _____ Susan Brennan	Chief Executive Officer & Director (Principal Executive Officer)	February 20, 2024
/s/ Paul Weibel _____ Paul Weibel	Chief Financial Officer (Principal Financial and Accounting Officer)	February 20, 2024
* _____ David Salisbury	Chair of the Board of Directors	February 20, 2024
* _____ Sen Ming (Jimmy) Lim	Director	February 20, 2024
* _____ Graham van't Hoff	Director	February 20, 2024
* _____ H. Keith Jennings	Director	February 20, 2024
* _____ Stephen Hunt	Director	February 20, 2024
* _____ Stefan Selig	Director	February 20, 2024

* By: /s/ Paul Weibel

Name: Paul Weibel
Title: Attorney-in-Fact



NORTH AMERICA SOUTH AMERICA EUROPE ASIA

800 Capitol St., Suite 2400
Houston, TX 77002-2925
T +1 (713) 651-2600
F +1 (713) 651-2700

February 20, 2024

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

Re: Form S-3 Registration Statement

Ladies and Gentlemen:

We have acted as special counsel to 5E Advanced Materials, Inc., a Delaware corporation (the "Company"), in connection with the Company's shelf registration statement on Form S-3 (as amended) to be filed by the Company with the Securities and Exchange Commission (the "Commission") on or about the date hereof (the "Registration Statement"), in connection with the registration under the Securities Act of 1933, as amended (the "Securities Act"), and proposed offer, issuance and sale from time to time on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, as set forth in the Registration Statement, the prospectus contained therein and any supplement to the prospectus, of shares of common stock of the Company, par value \$0.01 per share (the "Common Stock").

It is understood that the opinions set forth below are to be used only in connection with the offer, issuance and sale of the Common Stock while the Registration Statement is in effect. The Registration Statement provides that the Common Stock may be offered in amounts, at prices and on terms to be set forth in one or more prospectus supplements or free writing prospectuses.

This opinion letter is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K promulgated under the Securities Act.

In rendering the opinions set forth below, we have examined and are familiar with originals or copies, certified or otherwise identified to our satisfaction, of (i) the Amended and Restated Certificate of Incorporation of the Company, as in effect on the date hereof (the "Certificate of Incorporation"), (ii) the Amended and Restated Bylaws of the Company, as amended, as in effect on the date hereof (the "Bylaws") and, together with the Certificate of Incorporation, the "Organizational Documents"), (iii) the Registration Statement, and (iv) resolutions of the Board of Directors of the Company (the "Board") relating to, among other matters, the filing of the Registration Statement. We are familiar with the various corporate proceedings heretofore taken and additional proceedings proposed to be taken by the Company in connection with the authorization, registration, issuance and sale of the Common Stock. We have also examined originals, or copies certified to our satisfaction, of such corporate records of the Company and

other instruments, certificates of public officials and representatives of the Company and other documents as we have deemed necessary as a basis for the opinions hereinafter expressed. In such examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals and the conformity with the originals of all documents submitted to us as copies. We have also assumed that the Company is and will remain duly organized, validly existing and in good standing under the laws of the State of Delaware. As to certain facts material to this opinion letter, we have relied without independent verification upon oral and written statements and representations of officers and other representatives of the Company.

On the basis of the foregoing, and subject to (i) the Registration Statement and any amendments thereto being effective under the Securities Act, (ii) a prospectus supplement having been filed with the Commission describing the Common Stock being offered thereby, and (iii) all Common Stock being issued and sold in the manner stated in the Registration Statement and the applicable prospectus supplement and in accordance with a duly executed and delivered purchase, underwriting or similar agreement with respect to the Common Stock, we are of the opinion that, when (i) the Board, or a committee thereof, has taken all corporate action necessary to approve the final terms of the issuance and sale of the shares of the Common Stock, and (ii) the Company has received the consideration therefor (and such consideration per share is not less than the par value per share of the Common Stock), the Common Stock will be validly issued, fully paid and non-assessable.

The opinions expressed herein are based upon and limited to the General Corporation Law of the State of Delaware (including the statutory provisions, the applicable provisions of the Delaware Constitution and reported judicial decisions interpreting the foregoing). We express no opinion herein as to any other laws, statutes, regulations or ordinances.

We hereby consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the prospectus included in the Registration Statement. In giving such consent, we do not thereby admit that we are experts within the meaning of the Securities Act or that our firm is within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

/s/ Winston & Strawn LLP

Consent of Independent Registered Public Accounting Firm

5E Advanced Materials, Inc.
Hesperia, California

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement of our report dated September 28, 2022, relating to the consolidated financial statements of 5E Advanced Materials, Inc. as of June 30, 2022 and for the year then ended, appearing in the Company's Annual Report on Form 10-K for the year ended June 30, 2023.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ BDO USA, P.C.
Spokane, Washington

February 20, 2024

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3/A of 5E Advanced Materials, Inc. of our report dated August 30, 2023, 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, 2023. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

Denver, Colorado
February 20, 2024

CONSENT OF BARR ENGINEERING CO.

To: U.S. Securities and Exchange Commission
Board of Directors of 5E Advanced Materials, Inc.

Re: Registration Statement on Form S-3 of 5E Advanced Materials, Inc. dated February 20, 2024 (“S-3”)
Barr Engineering Co. (“Barr”), in connection with the S-3 consents to:

- (i) The filing and/or incorporation by reference by the Company and use of the Amended Technical Report Summary titled “Amended Initial Assessment Report (February 2024) on 5E Advanced Materials Fort Cady Project” with a revised report date of February 2, 2024, report date of May 11, 2023, and report effective date of April 1, 2023 (the “Amended Technical Report Summary”) that was prepared in accordance with Subpart 1300 of Regulation S-K promulgated by the SEC, filed as Exhibit 96.1 to the Company’s Annual Report on Form 10-K/A on February 2, 2024;
- (ii) The use of and references to our name, including our status as an expert or “qualified person” (as defined in Subpart 1300 of Regulation S-K promulgated by the SEC), in connection with the S-3 and any such Technical Report Summary; and
- (iii) The use of any quotation from, or summarization of, the particular section or sections of the Amended Technical Report Summary in the Form S-3, to the extent it was prepared by us, that we supervised its preparation of and/or that was reviewed and approved by us, that is included or incorporated by reference to the Form S-3.

Barr is responsible for, and this consent pertains to Sections 13, 15 and 18 of the Amended Technical Report Summary.

Neither the whole nor any part of the Amended Initial Assessment Report (February 2024) nor any reference thereto may be included in any other filings with the SEC without the prior written consent of Barr as to the form and context in which it appears.

Dated: February 20, 2024

By: /s/ Daniel R. Palo
Name: Daniel R. Palo, PhD, P. Eng., P.E.
Title: Senior Process Engineer, Barr Engineering Co.

CONSENT OF MIKE ROCKANDEL CONSULTING LLC

To: U.S. Securities and Exchange Commission
Board of Directors of 5E Advanced Materials, Inc.

Re: Registration Statement on Form S-3 of 5E Advanced Materials, Inc. dated February 20, 2024 (“S-3”)
Mike Rockandel Consulting LLC (“MRC”), in connection with the S-3 consents to:

- (i) The filing and/or incorporation by reference by the Company and use of the Amended Technical Report Summary titled “Amended Initial Assessment Report (February 2024) on 5E Advanced Materials Fort Cady Project” with a revised report date of February 2, 2024, report date of May 11, 2023, and report effective date of April 1, 2023 (the “Amended Technical Report Summary”) that was prepared in accordance with Subpart 1300 of Regulation S-K promulgated by the SEC, filed as Exhibit 96.1 to the Company’s Annual Report on Form 10-K/A on February 2, 2024;
- (ii) The use of and references to our name, including our status as an expert or “qualified person” (as defined in Subpart 1300 of Regulation S-K promulgated by the SEC), in connection with the S-3 and any such Technical Report Summary; and
- (iii) The use of any quotation from, or summarization of, the particular section or sections of the Amended Technical Report Summary in the Form S-3, to the extent it was prepared by us, that we supervised its preparation of and/or that was reviewed and approved by us, that is included or incorporated by reference to the Form S-3.

MRC is responsible for, and this consent pertains to Sections 10.3 and 14 of the Amended Technical Report Summary.

Neither the whole nor any part of the Amended Initial Assessment Report (February 2024) nor any reference thereto may be included in any other filings with the SEC without the prior written consent of MRC as to the form and context in which it appears.

Dated: February 20, 2024

By: /s/ Mike Rockandel
Name: Mike Rockandel
Society for Mining, Metallurgy and
Exploration (Member No. 4122579)
Title: President, Mike Rockandel Consulting LLC

CONSENT OF TERRA MODELING SOLUTIONS

To: U.S. Securities and Exchange Commission
Board of Directors of 5E Advanced Materials, Inc.

Re: Registration Statement on Form S-3 of 5E Advanced Materials, Inc. dated February 20, 2024 (“S-3”)

Terra Modeling Solutions (“TMS”), in connection with the S-3 consents to:

- (i) The filing and/or incorporation by reference by the Company and use of the Amended Technical Report Summary titled “Amended Initial Assessment Report (February 2024) on 5E Advanced Materials Fort Cady Project” with a revised report date of February 2, 2024, report date of May 11, 2023, and report effective date of April 1, 2023 (the “Amended Technical Report Summary”) that was prepared in accordance with Subpart 1300 of Regulation S-K promulgated by the SEC, filed as Exhibit 96.1 to the Company’s Annual Report on Form 10-K/A on February 2, 2024;
- (ii) The use of and references to our name, including our status as an expert or “qualified person” (as defined in Subpart 1300 of Regulation S-K promulgated by the SEC), in connection with the S-3 and any such Technical Report Summary; and
- (iii) The use of any quotation from, or summarization of, the particular section or sections of the Amended Technical Report Summary in the Form S-3, to the extent it was prepared by us, that we supervised its preparation of and/or that was reviewed and approved by us, that is included or incorporated by reference to the Form S-3.

TMS is responsible for, and this consent pertains to Sections 8, 9, 10, 11 and 12 of the Amended Technical Report Summary.

Neither the whole nor any part of the Amended Initial Assessment Report (February 2024) nor any reference thereto may be included in any other filings with the SEC without the prior written consent of TMS as to the form and context in which it appears.

Dated: February 20, 2024

By: /s/ Louis Fourie
Name: Louis Fourie, P.Geo.
Title: Principal, Terra Modeling Solutions

CONSENT OF CONFLUENCE WATER RESOURCES LLC

To: U.S. Securities and Exchange Commission
Board of Directors of 5E Advanced Materials, Inc.

Re: Registration Statement on Form S-3 of 5E Advanced Materials, Inc. dated February 20, 2024 (“S-3”)

Confluence Water Resources, LLC (“CWR”), in connection with the S-3 consents to:

- (i) The filing and/or incorporation by reference by the Company and use of the Amended Technical Report Summary titled “Amended Initial Assessment Report (February 2024) on 5E Advanced Materials Fort Cady Project” with a revised report date of February 2, 2024, report date of May 11, 2023, and report effective date of April 1, 2023 (the “Amended Technical Report Summary”) that was prepared in accordance with Subpart 1300 of Regulation S-K promulgated by the SEC, filed as Exhibit 96.1 to the Company’s Annual Report on Form 10-K/A on February 2, 2024;
- (ii) The use of and references to our name, including our status as an expert or “qualified person” (as defined in Subpart 1300 of Regulation S-K promulgated by the SEC), in connection with the S-3 and any such Technical Report Summary; and
- (iii) The use of any quotation from, or summarization of, the particular section or sections of the Amended Technical Report Summary in the Form S-3, to the extent it was prepared by us, that we supervised its preparation of and/or that was reviewed and approved by us, that is included or incorporated by reference to the Form S-3.

CWR is responsible for, and this consent pertains to Section 7.3 of the Amended Technical Report Summary.

Neither the whole nor any part of the Amended Initial Assessment Report (February 2024) nor any reference thereto may be included in any other filings with the SEC without the prior written consent of CWR as to the form and context in which it appears.

Dated: February 20, 2024

By: /s/ Mathew Banta
Name: Mathew Banta, PH
AIH Cert. No. 15-HGW-7004
Title: Principal, Confluence Water Resources LLC

CONSENT OF ESCALANTE GEOLOGICAL SERVICES LLC

To: U.S. Securities and Exchange Commission
Board of Directors of 5E Advanced Materials, Inc.

Re: Registration Statement on Form S-3 of 5E Advanced Materials, Inc. dated February 20, 2024 (“S-3”)

Escalante Geological Services LLC (“Escalante”), in connection with the S-3 consents to:

- (i) The filing and/or incorporation by reference by the Company and use of the Amended Technical Report Summary titled “Amended Initial Assessment Report (February 2024) on 5E Advanced Materials Fort Cady Project” with a revised report date of February 2, 2024, report date of May 11, 2023, and report effective date of April 1, 2023 (the “Amended Technical Report Summary”) that was prepared in accordance with Subpart 1300 of Regulation S-K promulgated by the SEC, filed as Exhibit 96.1 to the Company’s Annual Report on Form 10-K/A on February 2, 2024;
- (ii) The use of and references to our name, including our status as an expert or “qualified person” (as defined in Subpart 1300 of Regulation S-K promulgated by the SEC), in connection with the S-3 and any such Technical Report Summary; and
- (iii) The use of any quotation from, or summarization of, the particular section or sections of the Amended Technical Report Summary in the Form S-3, to the extent it was prepared by us, that we supervised its preparation of and/or that was reviewed and approved by us, that is included or incorporated by reference to the Form S-3.

Escalante is responsible for, and this consent pertains to Sections 3, 4, 5, 6, 7, 17 and 20 of the Amended Technical Report Summary.

Neither the whole nor any part of the Amended Initial Assessment Report (February 2024) nor any reference thereto may be included in any other filings with the SEC without the prior written consent of Escalante as to the form and context in which it appears.

Dated: February 20, 2024

By: /s/ Steven Kerr
Name: Steven Kerr, P.G., C.P.G.
Title: Principal, Escalante Geological Services LLC

In connection with the Registration Statement on Form S-3 (the “Form S-3”) to be filed by 5E Advanced Materials, Inc. (the “Company”) with the U.S. Securities and Exchange Commission (“SEC”), the undersigned hereby consents to:

- (i) The filing and/or incorporation by reference by the Company and use of the Amended Technical Report Summary titled “Amended Initial Assessment Report (February 2024) on 5E Advanced Materials Fort Cady Project” with a revised report date of February 2, 2024, report date of May 11, 2023, and report effective date of April 1, 2023 (the “Amended Technical Report Summary”) that was prepared in accordance with Subpart 1300 of Regulation S-K promulgated by the SEC, filed as Exhibit 96.1 to the Company’s Annual Report on Form 10-K/A on February 2, 2024;
- (ii) The use of and references to the undersigned’s name as a “qualified person” (as defined in Subpart 1300 of Regulation S-K promulgated by the SEC), in connection with the Form S-3 and any such Technical Report Summary; and
- (iii) The use of any quotation from, or summarization of, the particular section or sections of the Amended Technical Report Summary in the Form S-3, to the extent it was prepared by the undersigned, that the undersigned supervised its preparation of and/or that was reviewed and approved by the undersigned, that is included or incorporated by reference to the Form S-3.

The undersigned is responsible for, and this consent pertains to Sections 1, 2, 16, 19, 21, 22, 23, 24 and 25 of the Amended Technical Report Summary.

Neither the whole nor any part of the Amended Initial Assessment Report (February 2024) nor any reference thereto may be included in any other filings with the SEC without the prior written consent of the undersigned as to the form and context in which it appears.

By: /s/ Paul Weibel
Name: Paul Weibel, CPA
(License No. CA 056912)
Title: Chief Financial Officer,
5E Advanced Materials, Inc.

Date: February 20, 2024