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

POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-1 ON FORM S-3 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

LEXARIA BIOSCIENCE CORP.

(Exact name of registrant as specified in its charter)

| Nevada | | 20-200 | 0871 | | |
|--|---|---|--|--|--|
| (State or other jurisd | iction of | (I.R.S. En | nployer | | |
| incorporation or orga | nization) | Identificat | ion No.) | | |
| | #100 740 N | IcCurdy Road | | | |
| | | Canada V1X 2P7 | | | |
| | | 765-6424 | | | |
| (Address, including zip code | | luding area code, of registrant's princi | ipal executive offices) | | |
| | | | | | |
| | - | oher Bunka | | | |
| Chief Executive Officer | | | | | |
| | Lexaria Bioscience Corp. #100 – 740 McCurdy Road | | | | |
| | | Columbia V1X 2P7 | | | |
| | (250) 765-6424 | | | | |
| (Name, address, inc. | | ne number, including area code, of age | ent for service) | | |
| | Co | and to | | | |
| | | ppy to: ichenzia, Esq. | | | |
| | | erlman, Esq. | | | |
| | | Ference Carmel LLP | | | |
| | 1185 Avenue of th | e Americas, 31st Floor | | | |
| | | k, NY 10036 | | | |
| | (212) | 930-9700 | | | |
| From t | me to time after the effecti | ive date of this registration statemen | . | | |
| | | ement of proposed sale to the public | | | |
| (-11) | | sy proposition and proving | | | |
| If the only securities being registered on this F $\hfill\Box$ | orm are being offered pursu | ant to dividend or interest reinvestmen | at plans, please check the following box. | | |
| If any of the securities being registered on this 1933 check the following box. \boxtimes | Form are to be offered on a | delayed or continuous basis pursuant | to Rule 415 under the Securities Act of | | |
| If this Form is filed to register additional secur list the Securities Act registration statement nur | | | | | |
| If this Form is a post-effective amendment fil registration statement number of the earlier effective amendment file. | | | bllowing box and list the Securities Act | | |
| If this Form is a registration statement pursuan with the Commission pursuant to Rule 462(e) u | | | that shall become effective upon filing | | |
| If this Form is a post-effective amendment to additional classes of securities pursuant to Rule | | | filed to register additional securities or | | |
| Indicate by check mark whether the registrant emerging growth company. See the definition company" in Rule 12b-2 of the Exchange Act (| s of "large accelerated file | | | | |
| Large accelerated filer Non-accelerated filer | | Accelerated filer Smaller reporting company Emerging growth company | | | |
| If an emerging growth company, indicate by chor revised financial accounting standards provide | | | ition period for complying with any new | | |

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.

EXPLANATORY NOTE

This Post-Effective Amendment No. 1 ("Post-Effective Amendment") to the Registration Statement on Form S-1 (Registration No. 333-271096) previously declared effective by the United States Securities and Exchange Commission (the "SEC") on May 8, 2023 (the "Registration Statement") of Lexaria Bioscience Corp. (the "Company") is being filed pursuant to the undertakings in the Registration Statement to update and supplement the information contained in the Registration Statement.

The Registration Statement registered the offer and sale of 2,106,000 shares of common stock and 2,106,000 warrants to purchase shares of common stock (the "Warrants"). As of the date of this Post-Effective Amendment, 844,196 Warrants have been exercised. This Post-Effective Amendment covers the sale of shares of common stock issuable from time to time upon the exercise of the 1,261,804 Warrants that remain outstanding and unexercised. All applicable registration fees were paid at the time the Registration Statement was originally filed.

This Post-Effective Amendment is being filed to (i) update the contents of the prospectus contained in the Registration Statement pursuant to Section 10(a)(3) of the Securities Act of 1933, as amended (the "Securities Act"), in respect of the continuous offering pursuant to Rule 415 of 1,261,804 shares of common stock issuable from time to time upon the exercise of the outstanding and unexercised 1,261,804 Warrants previously registered on the Registration Statement and (ii) convert the Registration Statement on Form S-1 into a registration statement on Form S-3.

i

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THESE SECURITIES MAY NOT BE SOLD UNTIL THE REGISTRATION STATEMENT FILED WITH THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PRELIMINARY PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND WE ARE NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

Subject to completion, dated January 24, 2024

Lexaria Bioscience Corp. Prospectus 1,261,804 Shares of Common Stock Issuable Upon Exercise of Outstanding Warrants

This prospectus relates to an aggregate of 1,261,804 shares of our common stock, par value \$0.001 per share, upon the exercise of warrants to purchase 1,261,804 shares of common stock that were issued as part of our May 11, 2023 public offering (the "Warrants").

As of the date of this prospectus, the Warrants have an exercise price of \$0.95 per share of common stock. The Warrants will expire on May 11, 2028. If the Warrants are exercised for cash, we will receive the proceeds from such exercise.

On January 23, 2024, the last reported sale price for our common stock was \$ 1.52 per share.

Our business and an investment in our common stock involve a high degree of risk. Before making any investment in our common stock, you should read and carefully consider risks described in the "Risk Factors" section on page 3 of this prospectus.

Neither the United States Securities and Exchange Commission nor any state securities commission has approved or disapproved of the common stock offered hereby or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This prospectus is dated

TABLE OF CONTENTS

| | Page |
|--|------|
| PROSPECTUS SUMMARY | 1 |
| THE OFFERING | 2 |
| RISK FACTORS | 3 |
| CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS | 3 |
| <u>USE OF PROCEEDS</u> | 4 |
| PLAN OF DISTRIBUTION | 4 |
| DESCRIPTION OF SECURITIES | 4 |
| LEGAL MATTERS | 8 |
| EXPERTS | 8 |
| WHERE YOU CAN FIND MORE INFORMATION | 8 |
| INCORPORATION OF CERTAIN INFORMATION BY REFERENCE | 9 |

Unless otherwise stated or the context otherwise requires, the terms "Lexaria" "we," "us," "our" and the "Company" refer to Lexaria Bioscience Corp., a Nevada corporation, and its consolidated subsidiaries.

You should rely only on the information contained in this prospectus and any related free writing prospectus that we may provide to you in connection with this offering. We have not, and the underwriters have not, authorized anyone to provide you with additional or different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our securities in this offering. Our business, financial condition, results of operations and prospects may have changed since that date.

PROSPECTUS SUMMARY

Company Overview

Lexaria Bioscience Corp. is a biotechnology company developing the enhancement of the bioavailability of a broad range of fat-soluble active molecules and active pharmaceutical ingredients ("APIs") using our patented DehydraTECHTM drug delivery technology. DehydraTECH combines lipophilic molecules or APIs with specific long-chain fatty acids and carrier compounds that improve the way they enter the bloodstream, increasing their effectiveness and allowing for lower overall dosing while promoting healthier oral ingestion methods.

DehydraTECH can be used with a wide range of active molecules encompassing fat-soluble vitamins, pain medications, hormones, PDE5 inhibitors, antivirals, nicotine and its analogs, and cannabinoids. Our technology can be applied to a variety of therapeutic indications, including hypertension and heart disease, and diabetes. DehydraTECH can be implemented in a multitude of ingestible or topically administered product formats including foods, beverages, oral suspensions, tablets, capsules, creams, lotions, and skin patches. It is suitable for use with a variety of product formats including pharmaceuticals, nutraceuticals, over-the-counter products, and consumer packaged goods.

DehydraTECH is a technology incorporated into the formulation and manufacturing process of new or existing orally ingestible and topical products. The procedure involves fusing the active ingredient as a delivery "payload" together with certain fatty acids and infusing the mixture into a substrate material. Using controlled dehydration processing, it combines the payload and fatty acids together at a molecular level. The newly combined molecules are then integrated into production of the end-product using any number of dosage formats. From foods and beverages to cosmetics and nutraceuticals, this technology extends across many product categories beyond the primary pharmaceutical focus of the Company. DehydraTECH formulations have been found in some cases to reduce the need for unwanted sweeteners or chemical masking agents used for flavor- and odor-blocking, allowing manufacturers to create low-sugar products with fewer calories and artificial sweeteners.

The Company has developed extensive experience from the formulation and production of its demonstration products, in various formats, that enables us to provide expert advice to our licensees with the integration of DehydraTECH in their products for the purpose of providing a more palatable and efficient delivery of bioactive molecules.

Lexaria supports our licensee's products with our technology. A part of our business plan is to encourage new and existing participants to license and utilize DehydraTECH to enable enhanced performance of their products. These products cross a wide range of lipophilic bioactive molecules including nicotine and cannabidiol ("CBD") with additional molecules of interest continually being evaluated.

Corporate Information

Our principal executive offices are located at 100 – 740 McCurdy Road, Kelowna, British Columbia, Canada, V1X 2P7. Our telephone number is 1-250-765-6424. We maintain a website at www.lexariabioscience.com. The information contained on our website is not, and should not be interpreted to be, a part of this prospectus. Lexaria Bioscience Corp. is a British Columbia based reporting issuer in Canada and as such, we are required to file certain information and documents at www.sedarplus.ca.

Available Information

Lexaria's common stock is quoted on the Nasdaq under the symbol "LEXX" and warrants are quoted under "LEXXW". We file annual, quarterly, and current reports, proxy statements and other information with the U.S. Securities Exchange Commission (the "SEC"). These filings are available to the public on the internet at the SEC's website at http://www.sec.gov. Lexaria Bioscience Corp. is a British Columbia based reporting issuer in Canada and as such, we are required to file certain information and documents at www.sedar.com

Our corporate website is www.lexariabioscience.com. This website address is not intended to function as a hyperlink and the information contained on our website is not intended to be a part of this Report. We make available free of charge on https://www.lexariabioscience.com/investors/regulatory-filings/ our annual, quarterly, and current reports, and amendments to those reports if any, as soon as reasonably practical after we electronically file such material with, or furnish it to, the SEC. Further details on our research programs are provided in our 2022 and 2023 Form 10-K filings. We may, from time to time, provide important disclosures to investors by posting them in the Investor Relations section of our website.

The address of our principal executive office and research laboratory is #100–740 McCurdy Road, Kelowna, British Columbia, Canada V1X 2P7. We maintain our registered agent's office and our U.S. business office at Nevada Agency and Transfer Company, 50 West Liberty, Suite 880, Reno, Nevada 89501. Our telephone number is (755) 322-0626.

THE OFFERING

Common stock outstanding 10,554,176 shares. (1)

Common stock offered by the Company 1,261,804 shares issuable upon the exercise of outstanding Warrants.

Description of WarrantsThe Warrants have an exercise price of \$0.95 per share. The Warrants expire on May 11, 2028.

Use of proceeds The gross proceeds if all the Warrant holders, as of the date of this prospectus, exercise their Warrants will

be approximately \$1,300,112; however, we are unable to predict the timing or amount of potential Warrant exercises. All of such proceeds will be used for research and development studies and the patent and legal costs associated thereto, and for general working capital purposes. It is possible that some of the Warrants

may expire and never be exercised.

Nasdaq symbol Our common stock is listed on the Nasdaq Capital Market under the symbol "LEXX".

Risk factors You should carefully consider the information set forth in this prospectus and, in particular, the specific

factors set forth in the "Risk Factors" section in the Form 10-K incorporated herein by reference before

deciding whether or not to invest in common stock.

(1) As of January 23, 2024, this number excludes the 1,261,804 shares of common stock issuable upon exercise of the Warrants, as well as:

4,032,813 shares of common stock issuable upon the exercise of outstanding warrants (other than the Warrants); and

· 485,936 shares of common stock issuable upon the exercise of outstanding stock options;

RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the risks set forth under the section captioned "Risk Factors" contained in our Annual Report on Form 10-K for the year ended August 31, 2023, which is incorporated by reference into this prospectus, and in the other reports that we file with the SEC and incorporate by reference into this prospectus, before deciding to invest in our common stock. The risks and uncertainties we have described are not the only ones we face.

If any of the events described in these risk factors actually occurs, or if additional risks and uncertainties that are not presently known to us or that we currently deem immaterial later materialize, then our business, prospects, results of operations and financial condition could be materially adversely affected. In that event, the trading price of our securities could decline, and you may lose all or part of your investment in our securities. The risks discussed include forward-looking statements, and our actual results may differ substantially from those discussed in these forward-looking statements. See "Cautionary Note Regarding Forward-Looking Statements."

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, and any documents we incorporate by reference, contain certain forward-looking statements that involve substantial risks and uncertainties. All statements contained in this prospectus and any documents we incorporate by reference, other than statements of historical facts, are forward-looking statements including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

The words "anticipate", "believe", "estimate", "expect", "intend", "may", "plan", "predict", "project", "target", "potential", "will", "would", "could", "should", "continue" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward-looking statements include, among other things, statements about: the status, progress and results of our research programs; our ability to obtain regulatory approvals for, and the level of market opportunity for, our product candidates; our business plans, strategies and objectives, including plans to pursue collaboration, licensing or other similar arrangements or transactions; our expectations regarding our liquidity and performance, including our expense levels, sources of capital and ability to maintain our operations as a going concern; the competitive landscape of our industry; and general market, economic and political conditions.

These forward-looking statements are only predictions and we may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, so you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our business, financial condition and operating results. We have included important factors in the cautionary statements included in this prospectus that could cause actual future results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

You should read this prospectus with the understanding that our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements whether as a result of new information, future events or otherwise, except as required by applicable law.

USE OF PROCEEDS

The gross proceeds if all the Warrant holders, as of the date of this prospectus, exercise their Warrants will be approximately \$1,300,112; however, we are unable to predict the timing or amount of potential Warrant exercises. Accordingly, all such proceeds will be used for working capital and general corporate purposes. It is possible that some, or all, of the Warrants may expire and never be exercised.

PLAN OF DISTRIBUTION

We will issue shares of common stock offered hereby upon exercise of the Warrants. As of the date of this prospectus, the Warrants are exercisable for a total of up to 1,261,804 shares of our common stock, which can be adjusted pursuant to the terms of the Warrants. We will not issue fractional shares upon exercise of the Warrants. Each of the Warrants contains instructions for exercise. The Warrants may be exercised upon surrender of the warrant certificate on or prior to the expiration date at the offices of the Warrant Agent, with the exercise form on the reverse side of the warrant certificate completed and executed as indicated, accompanied by full payment of the exercise price, by certified or official bank check payable to us, for the number of Warrants being exercised.

DESCRIPTION OF SECURITIES

The rights of our stockholders are governed by Nevada law, our Articles of Incorporation and our Bylaws, as amended. The following briefly summarizes the material terms of our common stock and preferred stock. We urge you to read the applicable provisions of Nevada Corporation Law, our Articles of Incorporation and our Bylaws.

Authorized Capital Stock

Our authorized capital stock consists of 220,000,000 shares of common stock, par value \$0.001 per share. As of January 23, 2024, there were 10,554,176 shares of our common stock outstanding.

Common Stock

We are authorized to issue up to a total of 220,000,000 shares of common stock, par value \$0.001 per share. Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of our stockholders. Holders of our common stock have no cumulative voting rights. Further, holders of our common stock have no preemptive or conversion rights or other subscription rights. Upon our liquidation, dissolution or winding-up, holders of our common stock are entitled to share in all assets remaining after payment of all liabilities and the liquidation preferences of any of our outstanding shares of preferred stock. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our Board out of our assets which are legally available. Such dividends, if any, are payable in cash, in property or in shares of capital stock.

Holders of shares of our common stock are entitled to cast at least 33.33% of the total votes entitled to be cast by the holders of all of our outstanding capital stock, present in person or by proxy, are necessary to constitute a quorum at any meeting. If a quorum is present, an action by stockholders entitled to vote on a matter is approved if the number of votes cast in favor of the action exceeds the number of votes cast in opposition to the action. The vote of 33.33% of our stock held by shareholders present in person or represented by proxy and entitled to vote at the Meeting will be sufficient to elect Directors or to approve a proposal.

Warrants

The following summary of certain terms and provisions of the Warrants is not complete and is subject to, and qualified in its entirety by, the provisions of the Warrants, the form of which is filed as an exhibit to the Registration Statement of which this prospectus forms a part. The Warrants were issued in book-entry form and were initially represented only by one or more global warrants deposited with the Warrant Agent, as custodian on behalf of The Depository Trust Company, or DTC, and registered in the name of Cede & Co., a nominee of DTC, or as otherwise directed by DTC pursuant to a warrant agency agreement between us and Computershare, Inc. together with its wholly-owned subsidiary, Computershare Trust Company, N.A., as Warrant Agent.

Duration, Exercise Price and Form

Each Warrant has an exercise price equal to \$0.95 per share. The Warrants are immediately exercisable and may be exercised until the five-year anniversary of the original issuance date of May 11, 2023. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price. Warrants were issued in electronic form.

Exercisability

The Warrants are exercisable, at the option of each holder, in whole or in part, by delivering to the Warrant Agent a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise. A holder (together with its affiliates) may not exercise any portion of such holder's warrants to the extent that the holder would own more than 4.99% of the outstanding common stock (or at the election of a holder prior to the date of issuance, 9.99%) immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of ownership of outstanding stock after exercising the holder's warrants up to 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Warrants.

Cashless Exercise

If at the time of exercise there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of the underlying shares to the holder, in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the Warrant.

Fundamental Transactions

In the event of a fundamental transaction, as described in the Warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, the holders of the Warrants will be entitled to receive upon exercise of the Warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Warrants immediately prior to such fundamental transaction. Additionally, as more fully described in the Warrants, in the event of certain fundamental transactions, the holders of the Warrants will be entitled to receive consideration in an amount equal to the Black Scholes value of the Warrants on the date of consummation of such transaction.

Transferability

Subject to applicable laws, a Warrant may be transferred at the option of the holder upon surrender of the Warrant to us together with the appropriate instruments of transfer.

Fractional Shares

No fractional shares of common stock will be issued upon the exercise of the Warrants. Rather, the number of shares of common stock to be issued will, at our election, either be rounded up to the nearest whole number or we will pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price.

Trading Market

There is no established trading market for the Warrants, and we do not expect a market to develop. We do not intend to apply for a listing of the Warrants on any securities exchange or other nationally recognized trading system. Without an active trading market, the liquidity of the Warrants will be limited. The common stock issuable upon exercise of the Warrants is currently listed on Nasdaq.

Rights as a Stockholder

Except as otherwise provided in the Warrants or by virtue of the holders' ownership of shares of common stock, the holders of the Warrants do not have the rights or privileges of holders of our shares of common stock, including any voting rights, until such Warrant holders exercise their Warrants.

Warrant Agent

The Warrants were issued in registered form under a warrant agency agreement between Computershare Inc. and its affiliate, Computershare Trust Company, N.A., collectively, as Warrant Agent, and us. The Warrants were initially be represented only by one or more global warrants deposited with the Warrant Agent, as custodian on behalf of The Depository Trust Company (DTC) and registered in the name of Cede & Co., a nominee of DTC, or as otherwise directed by DTC.

Anti-Takeover Provisions of Nevada State Law

Certain anti-takeover provisions of Nevada law could have the effect of delaying or preventing a third-party from acquiring us, even if the acquisition arguably could benefit our stockholders.

Nevada's "combinations with interested stockholders" statutes, NRS 78.411 through 78.444, inclusive, prohibit specified types of business "combinations" between certain Nevada corporations and any person deemed to be an "interested stockholder" for two years after such person first becomes an "interested stockholder" unless the corporation's board of directors approves the combination, or the transaction by which such person becomes an "interested stockholder", in advance, or unless the combination is approved by the board of directors and sixty percent of the corporation's voting power not beneficially owned by the interested stockholder, its affiliates and associates. Further, in the absence of prior approval certain restrictions may apply even after such two year period. However, these statutes do not apply to any combination of a corporation and an interested stockholder after the expiration of four years after the person first became an interested stockholder. For purposes of these statutes, an "interested stockholder" is any person who is (1) the beneficial owner, directly or indirectly, of ten percent or more of the voting power of the outstanding voting shares of the corporation, or (2) an affiliate or associate of the corporation and at any time within the two previous years was the beneficial owner, directly or indirectly, of ten percent or more of the voting power of the then outstanding shares of the corporation. The definition of the term "combination" is sufficiently broad to cover most significant transactions between a corporation and an "interested stockholder." These statutes generally apply to Nevada corporations with 200 or more stockholders of record. However, a Nevada corporation may elect in its articles of incorporation not to be governed by these particular laws, but if such election is not made in the corporation's original articles of incorporation, the amendment (1) must be approved by the affirmative vote of the holders of stock representing a majority of the outstanding voting power of the corporation not beneficially owned by interested stockholders or their affiliates and associates, and (2) is not effective until 18 months after the vote approving the amendment and does not apply to any combination with a person who first became an interested stockholder on or before the effective date of the amendment. We have made such an election in our original articles of incorporation.

Nevada's "acquisition of controlling interest" statutes, NRS 78.378 through 78.379, inclusive, contain provisions governing the acquisition of a controlling interest in certain Nevada corporations. These "control share" laws provide generally that any person that acquires a "controlling interest" in certain Nevada corporations may be denied voting rights, unless a majority of the disinterested stockholders of the corporation elects to restore such voting rights. Absent such provision in our bylaws, these laws would apply to us as of a particular date if we were to have 200 or more stockholders of record (at least 100 of whom have addresses in Nevada appearing on our stock ledger at all times during the 90 days immediately preceding that date) and do business in the State of Nevada directly or through an affiliated corporation, unless our articles of incorporation or bylaws in effect on the tenth day after the acquisition of a controlling interest provide otherwise. These laws provide that a person acquires a "controlling interest" whenever a person acquires shares of a subject corporation that, but for the application of these provisions of the NRS, would enable that person to exercise (1) one fifth or more, but less than one third, (2) one third or more, but less than a majority or (3) a majority or more, of all of the voting power of the corporation in the election of directors. Once an acquirer crosses one of these thresholds, shares which it acquired in the transaction taking it over the threshold and within the 90 days immediately preceding the date when the acquiring person acquired or offered to acquire a controlling interest become "control shares" to which the voting restrictions described above apply.

Nevada law also provides that directors may resist a change or potential change in control if the directors determine that the change is opposed to, or not in the best interests of, the corporation. The existence of the foregoing provisions and other potential anti-takeover measures could limit the price that investors might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our Company, thereby reducing the likelihood that you could receive a premium for your common stock in an acquisition.

Anti-Takeover Effects of Our Articles of Incorporation and Bylaws

The following provisions of our articles of incorporation and bylaws could have the effect of delaying or discouraging another party from acquiring control of us and could encourage persons seeking to acquire control of us to first negotiate with our Board:

- · no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the right of our Board to elect a director to fill a vacancy created by the expansion of the Board or the resignation, death or removal of a director, with our stockholders only allowed to fill such a vacancy if not filled by the Board;
- the ability of our Board to alter our bylaws without obtaining shareholder approval; and
- the requirement that a special meeting of stockholders may be called only by either (i) the Chairman; (ii) the President; (iii) Vice President, or (iv) at least two members of our Board, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company of Canada.

Stock Market Listing

On January 12, 2021, our common stock ceased trading on the OTCQX, and our common stock and public warrants commenced trading on Nasdaq under the symbols "LEXXX" and "LEXXW," respectively.

LEGAL MATTERS

The validity of the common stock offered hereby has been passed upon for us by Sichenzia Ross Ference LLP, New York, New York.

EXPERTS

The consolidated financial statements of the Company as of and for the year ended August 31, 2023, included in our Annual Report on Form 10-K for the year ended August 31, 2023, have been audited by MaloneBailey, LLP, independent registered public accounting firm, as stated in their report, and have been incorporated by reference herein in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

The consolidated financial statements of the Company for the year ended August 31, 2022, included in our Annual Report on Form 10-K for the year ended August 31, 2023, have been audited by Davidson & Company LLP, independent registered public accounting firm, as stated in their report, and have been incorporated by reference herein in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a Registration Statement on Form S-3 under the Securities Act to register the common stock offered by this prospectus. The term "Registration Statement" means the original Registration Statement and any and all amendments thereto, including the schedules and exhibits to the original Registration Statement or any amendment. This prospectus is part of that Registration Statement. This prospectus does not contain all of the information set forth in the Registration Statement or the exhibits to the Registration Statement. For further information with respect to us and the common stock being offered pursuant to this prospectus, you should refer to the Registration Statement and its exhibits. Statements contained in this prospectus as to the contents of any contract, agreement, or other document referred to are not necessarily complete, and you should refer to the copy of that contract or other documents filed as an exhibit to the Registration Statement.

We file annual reports, quarterly reports, current reports, proxy statements and other information with the SEC under the Exchange Act. You can read our SEC filings, including the Registration Statement, at the SEC's website at www.sec.gov.

The SEC also maintains a website (http://www.sec.gov) that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

Our website can be accessed at lexariabioscience.com. The information contained on, or that may be obtained from, our website is not, and shall not be deemed to be, a part of this prospectus.

The representations, warranties and covenants made by us in any agreement that is filed as an exhibit to the Registration Statement of which this prospectus is a part were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were made as of an earlier date. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This prospectus includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that they have gathered their information from sources they believe to be reliable, although they do not guarantee the accuracy or completeness of such information. While we believe that these industry publications and third-party research, surveys and studies are reliable, we have not independently verified such data.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus.

We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC:

- · our Quarterly Report on Form 10-O for the fiscal quarter ended November 30, 2023(filed with the SEC on January 12, 2024);
- our Annual Report on Form 10-K for the fiscal year ended August 31, 2023 (filed with the SEC on November 20, 2023);
- our Current Reports on Form 8-K filed with the SEC on October 3, 2023, October 12, 2023, October 16, 2023, October 18, 2023 and November 3, 2023;
- the description of our common stock included in our Form 8-A12B filed with the SEC on January 11, 2021; and
- all reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this prospectus and prior to the termination of this offering.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made on or after the date of the initial filing of the Registration Statement of which this prospectus is a part and prior to effectiveness of such Registration Statement, until we file a post-effective amendment that indicates the termination of the offering of the Securities made by this prospectus and will become a part of this prospectus from the date that such documents are filed with the SEC. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to Lexaria Bioscience Corp., #100–740 McCurdy Road, Kelowna, British Columbia, Canada V1X 2P7, Telephone: (250) 765-6424. Copies of the above reports may also be accessed from our website at www.lexariabioscience.com. We have authorized no one to provide you with any information that differs from that contained in this prospectus. Accordingly, you should not rely on any information that is not contained in this prospectus. You should not assume that the information in this prospectus is accurate as of any date other than the date of the front cover of this prospectus.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed modified, superseded or replaced for purposes of this prospectus to the extent that a statement contained in this prospectus modifies, supersedes or replaces such statement.

Lexaria Bioscience Corp.

Prospectus

1,261,804 Shares of Common Stock Issuable Upon Exercise of Outstanding Warrants

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

Set forth below is an estimate (except for registration fees, which are actual) of the approximate amount of the fees and expenses payable by us in connection with the issuance and distribution of the shares of our common stock described in this Post-Effective Amendment No. 1.

| SEC registration fee | \$ 2,644.80* |
|------------------------------|-----------------|
| Accounting fees and expenses | \$ 7,000 |
| Legal fees and expenses | \$ 25,000 |
| Miscellaneous | \$ |
| Total | \$ 34,644.80 |

^{*} Previously paid.

Item 15. Indemnification of Directors and Officers.

The Nevada Revised Statutes ("NRS") empower us to indemnify our directors and officers against expenses relating to certain actions, suits or proceedings as provided for therein. In order for such indemnification to be available, the applicable director or officer must not have acted in a manner that constituted a breach of his or her fiduciary duties and involved intentional misconduct, fraud or a knowing violation of law, or must have acted in good faith and reasonably believed that his or her conduct was in, or not opposed to, our best interests. In the event of a criminal action, the applicable director or officer must not have had reasonable cause to believe his or her conduct was unlawful.

Pursuant to our articles, we may indemnify each of our present and future directors, officers, employees or agents who becomes a party or is threatened to be made a party to any suit or proceeding, whether pending, completed or merely threatened, and whether said suit or proceeding is civil, criminal, administrative, investigative, or otherwise, except an action by or in the right of the Company, by reason of the fact that he is or was a director, officer, employee, or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust, or other enterprise, against expenses, including, but not limited to, attorneys' fees, judgments, fines, and amounts paid in settlement actually and reasonably incurred by him in connection with the action, suit, proceeding or settlement, provided such person acted in good faith and in a manner which he reasonably believed to be in or not opposed to the best interest of the Company, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful.

The expenses of directors, officers, employees or agents of the Company incurred in defending a civil or criminal action, suit, or proceeding may be paid by the Company as they are incurred and in advance of the final disposition of the action, suit, or proceeding, if and only if the director, officer, employee or agent undertakes to repay said expenses to the Company if it is ultimately determined by a court of competent jurisdiction, after exhaustion of all appeals therefrom, that he is not entitled to be indemnified by the corporation.

No indemnification shall be applied, and any advancement of expenses to or on behalf of any director, officer, employee or agent must be returned to the Company, if a final adjudication establishes that the person's acts or omissions involved a breach of any fiduciary duties, where applicable, intentional misconduct, fraud or a knowing violation of the law which was material to the cause of action.

The NRS further provides that a corporation may purchase and maintain insurance or make other financial arrangements on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise for any liability asserted against him and liability and expenses incurred by him in his capacity as a director, officer, employee or agent, or arising out of his status as such, whether or not the corporation has the authority to indemnify him against such liability and expenses. We have secured a directors' and officers' liability insurance policy. We expect that we will continue to maintain such a policy.

Disclosure of Commission Position on Indemnification for Securities Act Liabilities

Insofar as indemnification for liabilities under the Securities Act may be permitted to officers, directors or persons controlling the Company pursuant to the foregoing provisions, the Company has been informed that is it is the opinion of the SEC that such indemnification is against public policy as expressed in such Securities Act and is, therefore, unenforceable.

Item 16. Exhibits and Financial Statement Schedules.

| Exhibit | |
|--------------|--|
| Number | Description Plant Control of the Con |
| 2.1 | Plan of Conversion (included as Schedule "A" to our proxy statement/prospectus) |
| <u>3.1</u> | Amended and Restated Articles of Incorporation (incorporated by reference as Exhibit 3.1 to our Current Report Form 8-K filed January 14, 2021) |
| <u>3.2</u> | Second Amended and Restated Bylaws (incorporated by reference as Exhibit 3.2 to our Current Report on Form 8-K filed January 14, 2021) |
| 4.1 | Equity Incentive Plan (incorporated by reference to our Registration Statement on Form S-8 filed January 18, 2024) |
| 4.2 | Form of Warrant (incorporated by reference as Exhibit 4.1 to our Current Report on our Current Report on Form 8-K filed January 14, 2021) |
| 4.3 | Form of Representative's Warrant (incorporated by reference as Exhibit 4.2 to our Current Report on Form 8-K filed January 14, 2021) |
| 4.5 | Form of Warrant (incorporated by reference to Exhibit 4.5 to our Registration Statement on Form S-1 filed April 28, 2023) |
| 4.6 | Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.1 to our Current Report on Form 8-K filed October 3, 2023) |
| 4.7 | Form of Private Placement Warrant (incorporated by reference to Exhibit 4.2 to our Current Report on Form 8-K filed October 3, 2023) |
| | Legal Opinion of Sichenzia Ross Ference LLP (incorporated by reference to Exhibit 5.1 to our Registration Statement on Form S-1 |
| <u>5.1</u> | filed April 28, 2023) |
| <u>10.1+</u> | Executive Employment Agreement dated Dec. 31, 2021 with John Docherty (incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q filed January 14, 2022) |
| <u>10.2+</u> | Management Services Agreement dated Dec. 31, 2021 with C.A.B. Financial Services Ltd. (Chris Bunka) (incorporated by reference to Exhibit 10.2 to our Quarterly Report on Form 10-O filed January 14, 2022) |
| 10.3** | Intellectual Property License Agreement dated May 20, 2022 between Lexaria Hemp Corp. and Premier Wellness Science Co., Ltd. |
| | (incorporated by reference to Exhibit 10.3 to our Quarterly Report on Form 10-Q filed July 14, 2022) |
| <u>10.4</u> | <u>Underwriting Agreement with H.C. Wainwright & Co. LLC (incorporated by reference as Exhibit 1.1 to our Current Report on Form 8-K filed January 14, 2021)</u> |
| <u>10.5</u> | Asset Purchase Agreement with Hill Street Beverage Company Inc. (incorporated by reference as Exhibit 10.31 to our Registration Statement on Form S-1 filed November 20, 2020) |
| 10.6 | Equity Distribution Agreement with Maxim Group LLC (incorporated by reference as Exhibit 1.1 to our Current Report on Form 8-K |
| | filed August 12, 2022) |
| | Media Buys Agreement with SRAX (incorporated by reference as Exhibit 10.1 to our Current Report on Form 8-K filed December 16, |
| 10.7 | 2021) |
| 10.8 | Form of Warrant Agency Agreement (incorporated by reference to Exhibit 4.4 to our Registration Statement on Form S-1/A filed January 07, 2021) |
| 10.9 | Form of Warrant Agency Agreement (incorporated by reference to Exhibit 10.9 to our Registration Statement on Form S-1 filed April |
| 10.10 | 28, 2023) From a f Securities Durchase Agreement (in compared by reference to Euclidet 10.8 to any Registration Statement on Form S. 1 filed |
| <u>10.10</u> | Form of Securities Purchase Agreement (incorporated by reference to Exhibit 10.8 to our Registration Statement on Form S-1 filed April 28, 2023) |
| <u>10.11</u> | Form of Securities Purchase Agreement (incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K filed October 3, 2023) |
| 10.12 | Placement Agency Agreement with Maxim Group LLC dated May 8, 2023 (incorporated by reference to Exhibit 10.2 to our Current |
| | Report on Form 8-K filed May 10, 2023) |
| <u>10.13</u> | Work Order for Start-Up Activities with InClin, Inc. (incorporated by reference to Exhibit 10.3 to our Quarterly Report on Form 10-Q |
| | filed July 14, 2023) |
| <u>10.14</u> | Placement Agency Agreement with Maxim Group LLC dated September 28, 2023 (incorporated by reference to Exhibit 1.1 to our |
| | Current Report on Form 8-K filed October 3, 2023) |
| <u>16.1</u> | Letter of Davidson & Company LLP dated November 28, 2022 |
| 21.1 | List of Subsidiaries of the Registrant (incorporated by reference to Exhibit 21.1 to Form 10-K filed November 29, 2021) |
| 23.1 | Consent of MaloneBailey, LLP |
| 23.2 23.3 | Consent of Davidson & Company LLP, Chartered Professional Accountants Consent of Sichenzia Ross Ference LLP (Included in Exhibit 5.1) |
| 24.1 | Power of Attorney (Included in the signature page to our Registration Statement on Form S-1 filed April 3, 2023) |
| 101.INS | XBRL Instance Document |
| 101.SCH | XBRL Taxonomy Extension Schema Document |
| 101.SCH | XBRL Taxonomy Extension Calculation Linkbase Document |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase Document |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase Document |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase Document |
| 107 | Filing Fee Table (incorporated by reference to Exhibit 107 to our Registration Statement on Form S-1 filed April 3, 2023) |
| Exhibit | |

^{**} Portions of this exhibit have been omitted as the registrant has determined that the omitted information is not material and is the type that registrant treats as private or confidential.

Description

Number

⁺ Indicates management contract or compensatory plan.

Item 17. Undertakings.

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 provisions described under Item 15 or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification by it 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.

- (a) The undersigned registrant hereby undertakes:
 - 1. To file, during any period in which offers or sales are being made, a post-effective amendment to the 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 a prospectus filed with the SEC pursuant to Rule 424(b) under the Securities Act 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); and
 - 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)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section 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 Section 15(d) of the Securities Exchange Act of 1934, as amended (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.

- 2. 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.
- 3. 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.
- (b) The undersigned registrant hereby undertakes that, for the purpose of determining liability under the Securities Act to any purchaser if the registrant is relying on Rule 430B: (A) each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and (B) each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a 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 effective date, 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 effective date.
- (c) The undersigned registrant hereby undertakes that, for the purpose of determining liability under the Securities Act to any purchaser: if the registrant is subject to Rule 430C, 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.
- (d) 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 Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Exchange Act) 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.

SIGNATURES

Pursuant to the requirements of the Securities Act, 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 Kelowna, British Columbia, on this 24th day of January 2024.

LEXARA BIOSCIENCE CORP.

/s/ Christopher Bunka

Christopher Bunka Chief Executive Officer and Chairman (Principal Financial Officer)

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

| Signature: | Capacity: | Date: |
|--|---|------------------|
| /s/ Christopher Bunka Christopher Bunka | Chief Executive Officer and Chairman (Principal Financial Officer) | January 24, 2024 |
| /s/ John Docherty John Docherty | President and Director (Principal Executive Officer) | January 24, 2024 |
| /s/ Nicholas Baxter* Nicholas Baxter | Director | January 24, 2024 |
| /s/ Ted McKechnie* Ted McKechnie | Director | January 24, 2024 |
| /s/ Albert Reese Jr.* Albert Reese Jr. | Director | January 24, 2024 |
| /s/ Catherine C. Turkel* Catherine C. Turkel | Director | January 24, 2024 |
| * By: /s/ Christopher Bunka Christopher Bunka | Attorney in fact | January 24, 2024 |
| | 14 | |

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated November 17, 2023 with respect to the audited consolidated financial statements of Lexaria Bioscience Corp. for the year ended August 31, 2023.

We also consent to the references to us under the heading "Experts" in such Registration Statement.

/s/ MaloneBailey, LLP www.malonebailey.com Houston, Texas January 24, 2024

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this registration statement on Form S-3 of our report dated November 25, 2022 with respect to our audit of the consolidated financial statements of Lexaria Bioscience Corp. as of and for the year ended August 31, 2022, which appears in Lexaria Bioscience Corp.'s Annual Report for the year ended August 31, 2023.

We also consent to the reference to our firm under the heading "Experts" in this registration statement.

/s/ DAVIDSON & COMPANY LLP

Vancouver, British Columbia

Chartered Professional Accountants

January 24, 2024